

THE
**MOTOR
SHIP**

**Index to
Volume 49**

APRIL 1968 TO MARCH 1969

Issue No.		Pages	Special Surveys or Features
573	April	.. 1-57	Ships on Order European Ferries and Services Feature
574	May	.. 57A-112	B. and W. engines Oslo Exhibition Feature
575	June	.. 112A-158	— Ships on Order
576	July	.. 158A-208	— British Shipbuilding Today
577	August	.. 208A-260	Ships on Order
578	September	262-308	— Japanese Marine Industries
579	October	.. 310-356	Fishing Feature
580	November	358-404	— S.E.M.T.-Pielstick PC3 engine
581	December	404A-458	Automation Feature
582	January	.. 458A-530	—
583	February	.. 530A-586	—
584	March	.. 586A-636	—

ENGINEERING, CHEMICAL AND MARINE PRESS LTD.
33-39 Bowling Green Lane, London E.C.1

index to volume 49

A

Asborg Portland-Cement Fabrik, 36
 Asborg Vaerft A/S., 18
 "Aallotar", 52
 Aarhus Flydedok Og Maskinkompagni A/S., 36
 "Absalon", 50
 "Accivity", 74
 "Adencaucus Valley", 414, 473
 "ACT 1", 365, 548*
 "ACT 2", 548*
 ACTANZ Line, 549
 "Adigen", 414, 473
 Admiralty Materials Laboratory, 110
 "Adm. Wm. Callaghan", 495*
 "Adonis", 54
 "Adriana", 69, 483
 A.E.I. Steam Turbines, Special Survey, September
 "Aegir", 74, 274, 474
 Aegeis Shipping Co., 119
 Aflat Repairs of Sterngear, 564
 "Aflosos", 69, 478
 "Agamemnon", 319, 478
 "Agioc Victoria", 166, 472
 Agip Milano", 319, 477
 Alisa Shipbuilding Co., 578
 Air Conditioning A/B Svenska Flaktfabriken, 92*
 Air Conditioning:
 J. Samuel White, 456
 Kleen-flo, 447
 Norris Warming, 204
 Thermotank, 112
 Airflow Developments Ltd., 147, 296
 Air Products Ltd., 257
 Ajan", 319
 Ajan", 167, 484
 Ajal", 10
 Ajon", 473
 Akademik Wermadski", 474
 Aker Group, 327, 348
 "Akers Mek Verksted", 341
 "Akershus", 52
 "Aki Maru", 167, 481
 "Ako", 10, 475
 "Aktubinska", 10, 473
 "Atlandia", 52
 "Alandsfjarn", 50
 Alarms:—
 Negretti and Zambra, 448
 Rotraco, 633
 Transform, 635
 Alaskan Mail", 484
 Alba", 475
 Albert Friescke", 474
 Alberto Marsili", 466, 472
 Alberton Ltd., 571
 "Albright Explorer", 468, 471
 "Albright Pioneer", 364, 471
 "Alca", 86-87*
 "Aleksandr", 484
 "Aleksandr Serafimovich", 598
 "Alexander Hamilton", 292*
 Alexander, W. H. J. Ltd., 289
 "Alexandra Botelho", 275, 474
 "Alexandra Carras", 10, 479
 Alexandrian Shipyards, 520
 "Alfa", 472
 Alfa-Laval Group, 355*
 "Algocet", 414, 472
 "Algorail", 166, 472
 "Aliskmon", 466, 477
 "Alka", 475
 Allen, H. N. G., 66
 Allen, P. W. and Co., 41
 Allen, Sirk, 66
 Allen, W. H. and Sons, engines, 66, 293-294*, 635
 "Alied Trader", 364, 477
 Allweather Erode Paints Ltd., 404
 "Alma", 475
 "Almak", 274, 484
 Alpha Engines, 391
 "Alster Express", 408, 469, 598
 "Alvaro Obregon", 10, 478
 Amalgamated Power Engineering Ltd., 66, 293
 "Amanogawa Maru", 166, 478
 "Amantino Camara", 166, 472
 Amer Tupakka Oy, 600
 "America Maru", 364, 468, 480
 American Bureau of Shipping, 67
 American Export Isbrandtsen Lines, (A.E.I.L.), 376
 "American Lancer", 468, 484
 "American Lark", 469
 "American Leader", 469
 "American Legion", 468, 484
 "American Liberty", 468, 484
 "American Lynx", 469
 American President Lines, 373
 American Union Transport Co., 104
 "Amoco Brisbane", 275, 490
 Amoco Chemicals Corp., 308
 "Amoco Cromax", 10, 480
 Amsterdam Drydock Co., 243
 "Anakliya", 468, 473
 "Anamilema", 275, 483
 Anchorage Ferrying Services Ltd., 443
 Anchors, Armstrong Whitworth Marine, 92, 403
 "Ancona", 61

Andersen, C., Article on B. and W. Slow-speed Engines, B. and W. Survey, May
 Andersson, T., Article on Linseave, 578-519*
 Andes", 536
 Andora", 61
 Andrea Leopoldo", 10, 476
 Andrea Mantegna", 54
 Andros Castle", 540
 Andros City", 10, 478
 Andrea Hill", 479
 Anglo-Soviet Navigation Treaty, 72
 Anjou", 475
 Anne Mildred Brovig", 392*
 Antres", 289, 541
 Anti-fouling for Inlet Boxes, 188
 Anti-fouling, Redhead, 208
 Antilla Cape", 274, 314-318*, 474, 499*
 Anton Chekov", 467, 484
 Antonio Lazaro", 276, 287, 483
 Antrim Princess", 46, 549
 Aoi Maru", 414, 481
 Apollo", 191, 320, 480
 Apollonia", 54
 Appia", 54
 Appledore Shipbuilders Ltd., 72
 Aquacharm", 10, 477
 Aqualath", 319, 478
 Aqualory", 10, 479
 AquaGrace", 274, 479
 AquaJoy", 319, 479
 AquaPride", 466, 477
 Arabella", 11, 484
 Aracena", 483
 Archontas", 274, 484
 Arctic", 10, 477
 Arcturus", 541
 Ardrossan Dockyard", 101
 Ardtaraig", 549*
 Arges", 10, 477
 Argonaut", 68, 471
 Ariadne", 52
 Aristarchos", 478
 Armstrong Whitworth Marine Ltd., 92, 403
 Arran", 46
 Arsenal Triestino-San Marco, 620
 Artemis", 274, 483
 Artevelde", 50
 Articulated Towing at Sea (S.A.T.), 629*
 Artlenburg", 465, 474
 Arveprins Knud", 50
 A/S Shipping Consultants, 358
 Asa-Thor", 50
 ASEA", 586, 607
 Asia Botan", 467, 480
 Asia Momo", 320, 480
 Asia Rindo", 167, 480
 Associated Cargo Gear AB (ASCA), 100, 349
 Associated Container Transportation Ltd., (A.C.T.), 72, 356, 365
 Association of West European Shipbuilders (AWES), 554
 Astilleros de Cadiz, S.A.:—175, 307, 430, 521
 Steering Gear, 423
 Athelduches", 364, 484
 Atheliduke", 274, 484
 Athelknight", 84*, 484
 Athina Zafirakis", 319
 Atlanta", 475
 Atlantic Bridge", 166, 478
 Atlantic Container Line Ltd., 374
 Atlantic Marchioness", 467
 Atlantic Marques", 319, 479
 Atlantic Monarch", 480
 Atlantic Reefer", 414, 476
 Atlantic Shore", 173
 Atlantic Skou", 122, 474
 Atlantic Song", 100, 487
 Atlantic Star", 100, 487
 Atlas Copco, 89
 Atlas Electronik, 158
 Atlas McAlpine, Ltd., 450
 Athos", 69, 483
 Atrevida", 61-65*, 69, 472, 494*
 Atria", 467, 484
 Atuta Maru", 479
 Aurora II", 467, 480
 Austin and Pickersgill Ltd., 95, 418
 Automatic Control Eng. Ltd. (A.C.E.), 390
 Automatic Drawing Machine, World's Largest, 18
 Automation, Instrumentation and Remote Controls:—
 Alarms, 448, 633, 635
 Automatic Control Eng. Ltd. (A.C.E.), 390
 Automatic Priming for Cargo Pumps, 400*
 Automation Feature, 573-585*
 Automation in "Atrevida", 63-65
 Bergebragd", Machinery Installation, 213-215
 Boiler Water Monitors, 394
 Canadian Progress Equipment, 581-582*
 Cooling Water Systems, 109*
 Compressed Air Drying Plants, 404
 Computers, 586
 Computer Assisted Action Information System (C.A.A.I.S.), 586
 Computers, Shipboard, 586
 Costs, 573-575*
 Det Norske Veritas Rules, 538
 Digital Printer, Kienzle, 582
 Dobbie McInnes Gauging Equipment, 355
 Elbe Express" Equipment, 585-586*
 Electronic Controls for Engines, 204

Automation, Instrumentation and Remote Controls:—Contd
 Electronic Switchgear (London) Ltd., 447
 Elliott Lonsdale System, 8
 Equipment on "Sea Freightiner I", 8
 Equipment on "Southland Star", 245*
 Exhaust-gas Temperature Comparator, 341*
 Fiat Automation, 404
 Gauging Systems, 355, 580
 G.E.C. Elliott Automation Ltd., 580
 Glen Avon", Equipment, 578-580*
 Graviner Monitoring Equipment, 42
 ISIS Monitoring Systems, 446
 Jinjo Meru", Equipment, 93
 K.D.G. Instruments, 41, 447
 Level Controllers, 394
 Lockheed Precision Products Ltd., 122
 Manotherm Repair Services, 147
 Mimic Diagrams and Electronics Ltd., 63
 NEBB, 96
 Neill Varec Ltd., 580
 Polish Remote-Control System, 244*
 Propulsion Plant Monitoring Equipment, 404
 Relumit (London) Ltd., 576*
 Rotracor Alarms, 633
 Salinometer, Transistorized, 354
 See Controls Ltd., 404
 SEPA Automatic Control System 583-584*
 Serck Controls Supervising System, 258
 Siemens, 585
 St. Jasper", Automated Watch Keeper System, 451-452*
 Standard Equipment, 530A-531
 Standard Automatic Control Equipment, 17, 338*
 Teletron (Gt. Britain) Ltd., 42
 Thermostats, K.D.G., 41
 Trava-Dial Electronic Digital Display, 41
 Visual Flow Indicators, 155
 Westinghouse Brake and Signal Co., Controls Systems, 90, 635
 Wiltshire", Installation, 107-108
 See also Filters
 Auvergne", 475
 Avalon", 46
 Avenir", 52
 Avondale Shipyards Inc., 18, 128
 Aykhal", 473
 Ayrodev Processes Ltd., 621*
 Axel Johnson", 601
 Azteca", 483

Babcock and Wilcox, 588

"Badenstein", 68, 474
 Back Jo", 167, 481
 BAHCHE Heaters, 259
 Baikonur", 259
 Bailey Meters and Controls Ltd., 110
 Bakhesisary", 475
 Bakker, N.V., 423
 Balmoral", 48
 Balta", 475
 Baitean, S. A., 448
 Bamford, F. and Co., 154
 Banagrande", 540
 B and T Line, 545, 558
 Bandin", 167, 483
 Banja Luka", 477
 Bantry Bay", 123-125*
 Bantry Bay Towing Co., 123
 Barbel Bolten", 21-24*, 468, 474
 Bardic Ferry", 50
 Barnes Shipbuilding and Eng. Corp., 241, 456, 566
 Baron Cowdor", 11, 482
 Baron Dunmore", 467, 482
 Bartad Crest", 275, 473
 Barrad Foam", 466, 473
 Barrad Waves", 10, 473
 Bartlett, D. C., 568
 Bartram and Sons Ltd., 95, 119
 Bastiaan Broers", 540
 Bath Iron Works, 376
 Baxter, W. J., 391
 Bayernstein", 10, 473
 Baynes", 275, 471
 Beagle", 154
 Bearings, Michell, 549
 Beaumont (Air-Sea) Equipment Ltd., 91
 Belblue", 122, 473
 Beich, A. R., Article on Scott Lithgow Group Special Survey, September
 Belfast Harbour Commissioners, 393
 Belgrano", 474
 Bel-Hudson", 418*, 482
 Bell Venient", 468
 Bell Venture", 468
 Bell Victor", 468
 Bellini and Morcom Ltd., 66
 Belosean", 274, 482
 Belts, Vee Powerband, 354
 Belven", 275
 Belzona Molecular Metals Ltd., 382

"Benruschan", 471
Bending Machines, 207
Bengtsson, B. A., 332
"Benguet", 466*
"Benito", 467, 483
"Benimer", 320, 383
"Benisa", 414, 483
Benito Juarez, 166, 478
"Benjaliuk", 166
"Ben My Chree", 48
"Bensac", 471
"Bereznik", 364, 473
"Bergebrage", 211-215*, 275, 482, 525*
"Berge Commander", 122, 231, 479
"Bergehus", B and W Survey, May*
Bergen Engines, 631*
Bergens Mek. Verksted, 336, C30, 631*
Bergesen, Sig. d.y. and Co., 311, B and W Survey, May
"Berholmherper", 50
"Bertha Brovig", 468, 477
"Bessiegen", 79
"Beta", 466, 472
"Betelgeuse", 274, 473
Bethlehem Steel Corp., 392, 437, 584, 602
"Betula", 122, 474
"Beverwyl", 31, 275, 476
Bibby Line Ltd., 107, 322
Bibby, Wm. and Son Ltd., 208
Biber, W., Article on Flexible Mountings on "Koningin Julianas", 248-252*
"Biesczady", 482, 483
"Bikyo Maru", 477
"Birger Jarl", 56
Bishop, T. C., Article on Bristol Channel Ship Repairers and Eng. Ltd., 345*
"Bismarckstein", 319, 474
Bivac Air Co., 354
"Björgefjell", 167, 484
"Black Prince", 54
"Black Watch", 56
Blakeborough, J. and Sons Ltd., 42
Black, J. M., 434, 617
"Blanic", 482
Blast-cleaning, Hodge Clemco, 295
Bleijenberg, G. W., Article on Screw Pumps for Cargo Handling, 187-188*
"Blenheim", 56
Bloctube Controls Ltd., 204, 260, 338*
Blom and Voss, 33, 246, 326, 408, 418, 488, 544
"Bluebird", 166, 297*, 477
Blue Star Line, 245
B.O.C. Mini-deck Welder, 155*
Boels's Scheepswerven en Machinefabriek N.V., 93, 344, 432, 584
"Boheme", 166, 415*, 473
Boilers:—
 Controls, 354, 355
 Marine, 588
 Treatment, 448
 Walker Monitors, 394
"Boitwatersand", 319, 473
"Bol", 620
"Boleslaw", 482
Bolsones Verit, 35
"Bolton Abbey", 46
Bonfield, 332
B.P. Grangemouth Refinery, 16
BP Tanker Co., 449
Books, Publications and Specifications:—
 A.B.S. Rules for Steel Vessels, 67
 A.C. Generators, 404
 Bore Welding, 346
 Computer Aided Design, 415
 Computer in Shipping, 304
 Container Guide, 630
 European Shipping and Shipbuilding Yearbook, 67, 346
 Fiat Automation, 404
 Gas Turbine Manual, 252
 Gears in Mesh, 152
 Gland Packings, 260
 Guide for the Certification of Dry Cargo Containers, 390
 Hydraulic Cargo Winches, 348
 Imco, 404
 Instrumentation Publications Catalogue, 304
 Lloyd's Rules and Regulations, 67
 Marine Auxiliary Equipment, 138
 Marine B.o.T. Marine Radar Performance Specification, 390
 Marine Diesel Engines, 138
 Marine Life Saving Equipment, 450
 Merchant Ships and Shipping, 346
 Metric Basic Sizes for Engineering, 260
 Minimum Weight Constructions of Angles and offset Bulbs with Plating, 252
 Nautical Italian/English Dictionary, 138
 Non-Destructive Testing of Steel Forgings, 152
North East Shipbuilding, History of, 346
Numerical Methods in Engineering, 630
Paint Users Specification Guide, 304
Passenger Transportation, 138
Prevention of Cracking in Boiler Shells, 152
Protection of Steel Metal Coatings, 346
Pumping Machinery for Marine Propulsion, 252
Reed's Ocean Navigator, 630
Small Wire Ropes, 304
The Great Age of Sail, 138
Treatment of Water for Marine Boilers, 390
Tribology Leaflet, 304
Use of Inert Gas on L.P.G. Tanker, 404
"Bonanza", 319, 480
"Bore", 52
"Bore III", 52
"Bore V", 166, 473
"Borges", 540
"Bornholm", 50
Boston Deep Sea Fisheries Ltd., 136
"Boston Lincoln", 136-137*
"Boston York", 136

"Botnia", 56
"Bougainville", 473
Bow Thrusters:—
 KSB, 604*
 Samuel White, Gill Jet-type, 419*
Bowyer, E. E., 332
Bowring Steamship Co., 100
BP Marine Tank Cleaner, 521
Braby, Frederick and Co., 158
"Brading", 46
"Braemar", 56
"Brage", 466, 474
Brandon Bay, 123
Breda, Cant. Nav., 342
Bremer Vulkan, 408, 544
Bretagne, Ateliers et Ch., 487
"Brigit Maersk", 598
Brissonneau and Lotz S/A, 158
Bristol Aeroplane Plastics Ltd., 635
Bristol Channel Ship Repairers and Engineers Ltd., 296, 345*, 521
British and Irish Steam Packet Co., 141
"British Commerce", 437
British Engine Building, Special Survey, September
British Emto Corp., 110
British Hovercraft Corp., 16, 272
British India Steam Navigation Co., 464
"British Liberty", 121*, 122, 483
"British Loyalty", 320, 483
British Marine Equipment Council, 127, Article by W. L. S. Wallace, Special Survey, September
British Mechanical Engineering Confederation (BRIMEC), 288
British Polar Engines, 158, 449
British Rail Hovercraft Ltd., 272-273*
British Railways:—
 Container Services Operational Experience, 485-486*
 Ferry Orders for Swan Hunter, 16
 Hovercraft Operation 627-628*
 Irish Sea Container Services, 172
 "Isle of Islay", 147
 "St. George", 225-230A*
 Order for Decca Radar, 42
 "Freightiner 1", Container Ship, 4-8B*
 Stranraer/Larne Ferry Proposal, 549
British Ship Research Association, B.S.R.A., 419
British Steam Specialities Ltd., 112
British Steel Corp., 73, 356, 532-533
"Broadford", 48
Brocklebank, Thos. and Jno. Ltd., 277
Brooke Marine Ltd., 154
Brown, Boveri, 503
 Sulzer Turbo Machines Ltd., 549
Brown, David, Gear Industries Ltd., 208
Brown, James and Hamer Ltd., 569-570
Brown, John, Engineering (Clydebank) Ltd., 148, 326, 374
Brown, S. G., Ltd., 112
Brucker Survival Capsule, 182*
"Brunsbuettel", 466, 474
"Brushausen", 68, 474
"Brunsrode", 540
"Brunswick", 598
BTR Industries Ltd., 259
Budd, E. B., 332
"Bufford", 481, Special Survey, December
Bulk Carriers Described:—
 "Canadian Progress", 581-582*
 "Duunvegan Head", 300-302* (G.A. and Machinery Drawings)
 "Flowergate", 453*
 "Fuji Maru", 287*
 "Haif Addir", 195-198* (G.A. Drawings)
 Hitachi Zosen Standard Series, 347*
 "Jag Dev", 246-247*
 "Jinko Maru", 576*
 "Malimanger", 79-83* (G.A. Body Plans, Structural Sections and Machinery Drawings)
 "Maritime Queen", 347* (G.A. Drawings)
 Mini-bulkers 10-Ship Order, 488
 "Obo Prince", 349-350*
 "Ortovata", 70-71*
 "Otto Hahn", 420-422*
 Ralph Misener", 202*
 Standard Designs for Bulk/Timber Carriers, 85*
 "Sugar Crystal", 161-164B* (G.A. Midship Section and Machinery Drawings)
 "Wayway", 548*
"Bull Explorer", 11, 482
"Bulldog", 154
"Buntendor", 10, 474
Buoy, Stainless Steel, 572*
"Burevstnik", 475
Burleigh, T. H., 148
Burmeister and Wain:—
 British Licences, 59
 Building Tanker Sections for Aker Group, 325
First Japanese K-type Engine, 488*
First Super-large-bore Engine in Service, 211-215*
First U.K. Super-large-bore Engines, 547
Harland and Wolff Orders, 417
Kincaid-built Engines, 464
Kincaid Order Book, 287
K98FF-type Engine, Special Survey, May
Lubrication of Large-bore Engines, 157
Largest Kincaid-built Engine, 172
Lengthening and Conversion Contracts, 243
Medium-speed Engines on "Danmark", 283-284*
Polish Remote-control System, 244*
Progress During 1968, 534*
Restandard-sizing Liners, 42
Special Survey, May
Steamship Conversions, 33
Super-large-bore Engines, 2
Turbo Chargers for Medium-speed Engines, 179-180*
45HU Engine, Special Survey, May
Valve Grinding Machine, 256*, 528*

Burning Machines, Messer Griesham, 571*
"Bute", 46
"Butterworth System Inc.", 296
Buyers' Guide, 210
"Buzidja", 167, 481
"Byakudan Maru", 467, 480

C

"Cabo Izarra", 437*
"Caesarea", 46
Caird and Rayner Ltd., 152, 205, 346, 630
Caldecote, Viscount, 434
Caledon Shipbuilding and Engineering Co., 85, 96, 232, 356
"Caledonian Princess", 46
"Capri Getti", 480
"Camber Queen", 46
Cambridge Wine Cloth Co., 242
Camlock Flange Sales Corp., 207
Cammell Laird and Co. (Shipbuilding and Engineers) Ltd., 95, 167, 360, 496-497*, 547
Cammell Laird (Shiprepairs) Ltd., 193
Campbell, A. R., 617
"Camposalinas", 167
Camrex Ltd., 572
Canadian Department of Transport, 548
"Canadian Progress", 472, 581-582*
Canadian Vickers Ltd., 72, 174, 295
Canadian Westinghouse Co., 127
"Canaleto", 54
"Canguro Bruno", 275, 476
Cantieri Naval de Tirreno e Riuniti, 17
"Cap d'Antibes", 466, 473
Cape Insulation Ltd., 636
"Cape Sable", 467, 482
"Cape Wrath", 167, 482
"Capetan Costis", 10, 480
"Capetan Costis", 11, 480
"Capetan Giannis", 364, 471
"Capetan Tassos", 10, 478
"Capetan Yiannis", 89, 180
Cardiff Channel Dry Docks and Pontoon Co., 296
Carey, A. F., 373
Cargo-Dynamics, 16, 96, 306, 356, 423
Cargo Handling:—
 ASCA Ltd., 100
 Brissonneau and Lotz Deck Machinery, 89*
 Conflow Uniloader, 202
 Conveyor Ship, "Universe Conveyor", 128*
 Disposable Cargo Slings, 571
 Heavy-lift Equipment on "Magician", 424*
 Magromover Transport System, 424*
 Paper Roll Handling, 256*
 Scissor Lifts, 178*
 Screw Pumps for Tankers, 187-188*
 Self-discharging System for Cement, 36
Cargo Liners:—
 "Alividra", 61-65* (G.A. and Machinery Drawings)
 Building Vessels in U.K. and Japan, 595-596*
 Cargo Liners of 1968, 494*
 "Castor", 353*
Development of Hull Form, 565-567*
"Ling Yung", 169-171* (G.A. and Stowage Drawings)
"Magician" and "Historian", 605-610* (G.A. and Machinery Drawings)
"Mahar", 10, 474
"Mahsud", 277-280* (Machinery Drawings)
"Port Caroline", 395-397* (G.A. and Machinery Drawings)
"S.A. Constantia", 267*
Service Performance of "Southland Star", 245*
"Tai Ning", 419
See also Container Ships and Refrigerated Vessels
Cargo Vessels:—
 "Constante", 255*
 "Galicia", 98-99*
 "Welsh City", 234-238* (Machinery Drawings)
 "Zakopane", 549
 See also Liberty Ship Replacements
"Caribbean Venture", 319, 474
"Carina", 74
"Carisbrooke Castle", 48
"Carmen IV", 483
"Caroline", 467, 473
Carr, J. B., 568*
"Carras", 477
Carras, John C., 127
Carrington Slipways Pty. Ltd., 417
Carville Turboflex Ltd., 308
"Cassiopee", 466, 473
"Cassiopeia", 467, 484
"Castel Felice", 191
Castellammare Shipyard, 298
"Castor", 274, 353*, 474
Catamarans:—
 "Duplius", 432-433*
 World's Largest Catamaran Ferries, 504
Caterpillar Engines:—
 307
 Gas Turbines, 618*
Cathodic Protection, Wilson Walton International, 450
"Catin", 385
"Cavat", 467, 484
Cazalet, P. G., 568
"Cecia", 482
"Celestino", 166, 472
"Cellana", 319, 471
"Cemenmar Uno", 122, 483
"Cementador", 11
Centiaxial Fan Ltd., 344
Centi Elektro, 354
Central Gulf Steamship Corp., 85, 384

THE MOTOR SHIP

Centrifuges:—
 Sharples, 41*, 423*
 Thrig-Titan A/S, 92*

Centromer: 204

“Cerdic Ferry”, 50
 “Cervantes”, 121*, 471
 “Cesare Speich”, 450
 “Cetus”, 166, 339-340*, 476
 “Ceuta”, 69, 206*, 483

Chadburns Holding Ltd., 449

Chamberlain, Industries Ltd., 207
 “Chantilly”, 46

Chapman, J. W., 389

Charente Steamship Co., 605
 “Charlotte Maersk”, 483
 “Chastine Maersk”, 274
 “Chashmîa”, 166, 473

Chemical Carrier Order, 547*

Chemical Dosing Pumps, 394*

“Chen Chang”, 479
 “Cherry Sand”, 330*

Chesapeake Instrument Corp., 436
 “Chian Saibi”, 10
 “Chiukawa Maru”, 275, 480
 “Chipes”, 338
 “Chosei Maru”, 478
 “Chris-Marin, A/B”, 256*
 “Christian IV”, 45*, 54, 472
 “Christian Maersk”, 11, 482
 “Christine Maersk”, 482
 “Christista”, 598
 “Churucua”, 466, 471
 “Cilurnum”, 466, 476
 “Cimadevila Segundo”, 320, 483

Ciotat, Ch. Nav. de La, 115, 625-626*

“Cleasman”, 48
 “Clara Maersk”, 167, 484

Clarke Chapman and Co., 348

Classification Societies :—
 172
 “Det Norske Veritas”, 374
 Lloyd’s Register, 369
 “Claudia Maria”, 475
 “Claudio R”, 275, 306*, 476, 525*
 Clayton Crane and Hoist Co., 449
 “Clifford Maersk”, 598

Clutches :—
 Fawick Airflex, 78*
 Twiflex, 448
 “Clymency”, 11, 480

Coasters. See *Cargo Vessels and Paragraph Ships*

Coast Lines, 559

Coatings :—
 Allweather Evode Paints Ltd., 404
 Camrex, 259
 Redhand Antifouling, 208

Cochrane and Sons Ltd., 568

Cockerill-Ougrée Providence S.A., 374

Coles, R. J., 568
 “Colorado”, 484
 “Colomba”, 48
 “Columbialand”, 85

Communications Equipment :—
 International Marine Radio, 257
 Marconi Marine, 450

Compact Orbital Gears Ltd., 373

Comparator for Exhaust Gas Temperatures, 341

Compass, Sirius, 363*

Compensated Tonnage, 587

“Compiegne”, 46
 Completions in 1968, 470-484
 Completions, Recent, 364

“Composalinas”, 483

Compressors :—
 Hamworth, 42, 94*
 I.H.I.

Computers :—
 Shipboard, 586
 Shipyard, 602
 “Comte de Nice”, 52

Computerised Shipboard Data Processing, 174

Conch Group, Licence for Rotterdam Drydock, 18

Concord Line A/S, 382

Connell Chas. and Co., 600

“Connell, W. C.”, 148
 “Conoco”, 324
 “Constance”, 255*, 467, 478
 “Container Dispatcher”, 376
 “Container Forwarder”, 376

Containeralisation :—
 A.B.S. Container Certification Guide, 390
 A.E.I.L.’s Trans-Atlantic Service, 376
 Associated Container Transportation Ltd., 72, 365

Atlantic Container Line Ltd., 374
 Collapsible Containers, Metstak, 41*

Container Guide, 630

Container Rubber Seals, 112

Container Securing Equipment, 208

Container Services Exhibition, 171

Container Ships on Order, 159, 469

Container Shipping, 358

Effect on World Trade, 264

Freight Container and Container Handling Exhibition, 600

General Purpose Crews for Container Ships, 407

Genoa Exhibition and Congress, 324

International Exhibition, 288

International Symposium, 13

Japanese Container Ships, 313

Largest Container Gantry in Europe, 233

Lists of Container Ships in Service and on Order, 468-469

Manchester Liners Container Order, 42

Metro Cammell Containers, 356

Propulsion of Container Ships, 159

Refrigerated Containers, 208*

U.S. Seven-ship Contract, 373

Container Marine Lines, 376

Container Ships :—
 Axel Johnson, 601
 “Barbel Bolten”, 21-24* (G.A. Drawings)

Container Ships of 1968, 561*

“Elbe Express”, 408-412* (G.A. Midship Section and Machinery Drawings)

“Hakone Maru”, 333-336* (G.A. and Structural Sections)

“Impala”, 385-388* (G.A. and Stowage Drawings)

In Service and on Order, Lists, 468-469

“Japan Ace”, 174 (G.A. Drawings), Special Survey, December

Japanese, 313

“Kashu Maru”, 416* (G.A. Drawings)

“Manchester Challenge”, 425-433* (G.A. and Machinery Drawings)

Operational Experience of British Railway, 485-488*

Proposal for World’s Largest, 531

“Sea Freightliner I”, 5-88* (G.A. Midship Section and Machinery Drawings)

“Sea Witch”, 376-381 (G.A. Stowage and D. W. Scale)

“Stadt Aschendorf”, 545-546* (G.A. Drawings)

Continental Shipper, 319, 480

Contracts, See *Shipbuilding Contracts*

Conversions, see *Jumboising*

Cook, R. F., 390*

Co-ordinated Caribbean Transport Inc., 97

Coral Masandra, 466, 476

Corantin, 364, 476

Corfu Island, 598

Cork Insulation and Asbestos Co., 157

Corsario Negro, 45*

Corse, 52

Costantini Yemelos, 501-503*

Costa Rica Maru”, 167, 479

Costas Frangos, 480

Costs :—
 Automation, 573-575*
 Fishing Vessel Construction, 453-454
 Hovercraft, Special Survey, September
 Machinery Operating Costs for High-powered Ships, B. and W. Survey, May
 Metric Standards Changeover, 265
 Shipbuilding, British, Special Survey, September

Shipbuilding, Japanese, 407

Spanish Shiprepairing, 102

Steel, 532-533

Cote d’Azur, 46

Couplings :—
 All-metal Flexible Couplings, 452*

Geislinger, 78

Pipe, Betabite, 635

Twiflex, 447

Turboflex, 308

Courtburn Positioners Ltd., 207

Cowal, 46

Cowes Castle, 48

Cox, H. P. B., 434

Crack Detector, 110

Craft, Inflatable, 403

Crane Packing Ltd., 37, 92, 135, 152, 205

Cranes, Deck :—
 ASEA Cranes on “Doris”, 86*
 Orenstein-Koppel Gemini, 99*

Cranes, Paeceo-Vickers, 233

Cranston, E. W., 11

“Credo”, 274, 482

Cromwell, E. M. and Co., 34, 101, 126

Crossley Engines, 233, 287

Crowe, Dr. Samuel, 568

Cunard International Technical Service Ltd., 233

Cunard Steamship Co., 74, 505

Curacao Drydock Co., 295

Currie, J. B., 389

“Cynthia”, 54

D

“Daien Maru No. 31”, 479

“Daiki Maru”, 122, 481

“Dai Lung”, 320, 481

“Dairyu Maru”, 477

“Daiyu Maru No. 5”, 10, 478

“Daneb”, 122

Danish Shipyards, Association of, 94

Danish State Railways, 283

“Danmark”, 166, 283-286*, 472, 513*

Daros Piston Rings, 35*

Dasic Equipment Ltd., 37, 122

Data-recorder, Radiation, 571

“Dauphine”, 10, 473

“Davanger”, 167, 484

Davie, Geo. T. and Son, 72, 241

Davie, W. C., 148

D.E.B. Electronics Ltd., 110

Decca, 17, 422, 74, 110, 111, 127, 208, 260, 444, 446, 450, 487, 586, 602, 636

Decca Radar OG Navigator A/S, 96

Deck Machinery :—
 Brissonneau and Lotz, 89*
 Clarke Chapman, 348*
 K. and L. Precision Engineering, 572
 Norwinch, 930
 Pusnes, 98

Technisch Bureau West, 424*

Tokyo Kikai Ltd., 93*

Westfalia Linen, 91*

Winches, Self-tensioning, 135*

Degedo, 414, 470

Delbrøn Mt. Arayat”, 474

Delphi, 478

Delphi Freedom, 467

Delta Argentina, 484

Delta Brasil, 484

Delta Mexico, 484

“Delta Paraguay”, 484

“Delta Uruguay”, 484

Demetra, 10, 480

“Deneb”, 274, 483

Derricks, Stulken, 607*

De Scheide, N.V. Kon. Mij., 393

“Desh Deep”, 34*

Desma Eng. Co., 391

325

Det Norske Veritas, 72, 374, 418, 538, 586

Deutschland, 52

Devcon Corp., 94, 103

Diesel Engine Users Assoc., 17, 488

Digital Printer, Kienzle, 582

“Dimetri Medelejew”, 474

“Dingle Bay”, 123-125*

Dirch Maersk, 472

“Dirk Mittmann”, 166, 474

Discovery Bay, 469

“Disko”, 68, 472

Distillation Equipment, 206

Distillers Co. (Carbon Dioxide) Ltd., 280

Distillers, Sea Water, 414

Distress Signals, Nauteknik A/S, 89

“Ditte Skou”, 598

Dobbie McInnes Ltd., 354

Dobler, J. P., Article on French Shipbuilding, 527-528*

Docks, Building :—
 Ciotat 350 000-ton Dock, 625-626*
 Eriksberg 500 000-ton Dock, 287

Kockums Mek Verkstdas, 436*

Kure 400 000-ton Dock, 174

Mitsui 500 000-ton Dock at Chiba, 217*, 549

Monfalcone 320 000-ton Dock, 288*

Nippon Kokan Tsu Yard, 547*

Urags, 560*

Verolme Million-ton Dock, 562

World’s Largest Dock, 231

Docks, Floating :—
 Aluminium, 242

Boele’s Scheepswerven, 564

Dutch-built 1 000-ton Dock, 33*

East German 12 000-ton Dock, 33

Polish 9 000-ton Dock, 564*

San Francisco, 437

Schedeldoepoort, 563

South African 1 120-ton Dock, 33*

Soviet Order, 101

Todd Shipyards Corp., 391

Trincomalee Dock, 393, 560

World’s Largest, 343

Docks, Repair :—
 Aruba, 149

Belfast, 200 000-ton Dock, 393*

British, 520

Curacao Dock, 295, 393

Ghansian, 295

Hitachi, 520

I.H.I. Aioi Dock, 343*

Kawasaki 500 000-ton Dock, 343*, Special Survey, December

Maltese 250 000-ton Dock, 391

Morseyside, 619

Scott Lithgow, 520

Singapore 300 000-ton Dock, 562

Tilbury, 146*

Tsuneishi 200 000-ton Dock, 520

Verolme, 145

Wilton and Rhine-Schelde Groups, 243

“Dr. Ingrid”, 50

Dolphin Line Ltd., 488

Dominguez G., Article on Spanish Fishing Industry, 455-456*

“Dona Rossana”, 166, 478

Dong Back, 481

Dorchester Club, 497-498*

Dorey, P. L., 400

“Doris”, 86-87*

“Doris Yorke”, 472

Dorman Engines, 111, 233

Dorman Long (Africa) Ltd., 438

Dorman Long Swan Hunter (Pty.) Ltd., 570

“Doto”, 487, 481

Dovrefjell, 10, 474

“Dowa Maru No. 3”, 167, 479

Doxford Engines :—
 580mm-bore J-type Engine, 14-15*

J-type Engines, 405, Article by R. F. Butler, Special Survey, September

J-engine in “Orotava”, 70-71*

J-engine in “Wiltshire”, 107-108

Progress during 1968, 537*

Torsiograph for slow-speed Engines, 139-140*

Doxford Group :—
 “Iron Endeavour”, 601

Liberty Replacement Ship, “Sheaf Crest”, 183-186*

“Magician”, 605-610*

Re-organisation of, 389

“Dragon”, 52

“Dragor”, 56

Drawing Office Staff Wages, 231

Dredgers :—
 “Vera Barton”, 103*

Drilling Rigs :—
 John Brown Engineering (Clydebank) Ltd. Order, 328

“Ranger L”, 602*

“Drogden”, 56

“Drottingen”, 121*, 122, 484, 513*

“Drottning Victoria”, 56

“Drupa”, 401

Drynamels Ltd., 633

Drypool Engineering Co., 568

Drysdale and Co., 91, 205

Dry Vent Ltd., 404

Dubigeon-Normandie S.A., 487

“Dublin”, 518

Duke of Holland”, 541-544*

Duncan, J. A., 100

THE MOTOR SHIP

Dunlop Floating Hose, 111
 Dunlop, G.R.G. Division, 205
 Dunlop Ltd., 403
 "Dunospay", 74*
 Dunshes, R., 559
 Dunston, Richard (Hessle) Ltd., 74, 327, 547
 "Dunvegan Head", 166, 300-302*, 476
 "Duplus", 432-433*
 Du Pont Explosive Welding, 258*
 Duramin Ltd., 208
 "Dyvi Oceanic", 122, 482
 "Dzurme", 482

E

"Earl of Zetland", 48
 East Asiatic Co., 61
 Echo-sounder, Simrad, 449
 Eckhard, J., 434
 "Eckwardersand", 122, 473
 Ecco, A/S, 92
 Editorial:—
 Automation, 530A-531
 British Yards to Close, 1
 Container Shipping, 358
 Engine Selection, 404A-405
 Far Eastern Shipbuilding, 158A-159
 Future Technical Developments, 458A-459
 General Purpose Crews, 113
 Liberty Replacement Ships, 57A-58
 L.P.G. Tanker Fleet, 113
 Medium Speed Engines, 586A-587
 Shipbuilding Mergers, 208A
 Super-large-bore Engines, 262-263
 Tankers to Burn Crude Oil, 310-311
 World Shipbuilding, 112A
 World Tanker Fleet, 311
 Edmiston, J. G. and Co., 296
 Edwards, J. R., 389
 "Eemstroom", 191
 Egadi, 54
 Eglington, 10, 473
 Egnotia, 54
 Eikaku Maru, 481
 Einswardersand, 364, 468, 473
 Einyo Maru, 478
 Eishim Maru No. 21, 479
 Eishin Maru No. 18, 481
 Electors, F. A. Hughes, 341
 Elan, 468
 "Elbe Express", 230, 364, 408-412*, 468, 473,
 565-566*
 Electrical Systems, Testing of, 603-604*
 Electronics Associates Ltd., 17
 Electronic Switchgear (London) Ltd., 354, 447
 "Elina", 473
 Elizabeth Fernstrom, 483
 Elisabeth Maersk, 472
 Elliott Automation, 8, 176, 208, 580
 Elliott Automation Control Valves Ltd., 73
 "El Mansour Bi Liah", 483
 "El Mansour Dahbi", 274, 483
 Elsa Easberger, 364, 474
 Elsan-Cairo Sewage Treatment System, 94
 Elsinore Shipbuilding and Engineering Co., 179,
 283
 "Elwha", 484
 El-Yam Group, 195
 "Embassage", 364, 476
 "Emerald", 364, 478
 "Emil Reith", 466, 474
 "Empire Star", 438
 "Encounter Bay", 172*, 469
 Engell-Jensen, K., Article on Danish Shipbuilding,
 514-515*
 Engine Building Companies, List of British,
 Special Survey, September
 Engines:—
 Acoustic Cladding of Diesel Engines, 69
 Bedplate Repairs, 438*
 Bergen, 631*
 British Engine Building, 532, Special Survey,
 September
 British Polar, 449
 Burmeister and Wain (See under)
 Burning Crude Oil, 310-311, 342, 559
 Caterpillar (See under)
 Chrome-plating Liners, 555
 Crankshaft Testing, 90
 Crosshead Bearings, 100
 Cylinder Lubrication, 149-152*
 Cylinder Oil, 294
 Demand for Engines of 25 000 bhp and Above,
 209
 Diesel-engined Methane Tankers, 405
 Doxford (See under)
 Economic Comparisons, B. and W. Survey,
 May
 Engine Selection, 404A-405
 Fairbanks Morse (See under)
 Fiat (See under)
 First Super-large-bore Engined Ship, 211-215*
 First U.K. Super-large-bore Engines, 547
 Flexible Mountings for Medium-speed
 Machinery, 248-254*
 Flexible Mountings on "St. George", 268-
 271*
 Free-piston, 369-372*, 559
 Government Aid to U.K. Builders, 263
 Gotaverken (See under)
 Industrie, Motorfabrik de, 38
 Intervals Between Overhauls, 284
 Japanese Diesel Engineering, Special Survey,
 December
 Largest Diesel Engine, 114
 Liner Wear Rates, 558
 Machinery for Ships of Above 100 000 tons,
 284
 Machinery in Ships Completed (See under)

Engines:—Contd.

Main Machinery for Electrical Power Generation, 210
 M.A.N. (See under)
 Marine Diesel Engineering in 1968, 534-538*
 Marine Diesel Engines, 138
 Medium-speed, 27-32*, 114, 538, 586A-587,
 Special Survey, February
 Mirries (See under)
 Most Powerful Diesel Engine, 199*
 Paxman (See under)
 Napier Amalgamate with Paxman, 374
 Normo, 631*
 Nuclear Machinery on "Otto Hahn", 420-
 422*
 Operating Results of Medium-speed Engines,
 Special Survey, February
 Progress in 1968, 407
 Propulsion of Container Ships, 159
 Prospects of Propulsion Systems, 459
 Ruston (See under)
 Selection During Past Six Years, 533
 Selection of, 559
 S.E.M.T.-Pielstick (See under)
 Spanish Production, 312, 324
 Sulzer (See under)
 Super-large-bore, 2, 262-263, 368-368*
 Super-large-bore Engines on Order, List of,
 534
 Torsiographs, 139-140*
 Turbo Chargers, 179-180*
 UDAB, 538
 U.K. Order Book, 59
 Unmanned, B. and W. Survey, May
 Werkspoor N.V. (See under)
 "England", 52
 English Electric Co., 451
 English Electric Diesels Ltd., 580, 635
 English Steel Castings Corp., 208
 "Enrico Berlingieri", 540
 Equitable Equipment Co., 325
 "E. R. Antwerp", 466, 472
 "Erdine", 10, 478
 "Eris", 274, 473
 Eriksberg Mek. Verkstads, A/B, 109, 242, 287,
 292, 511-512*
 "Ernst G. Russ", 167, 480
 Erpecom, G. von, 434
 Escapade, 373
 Escher Wyss c.p. Propellers, 303-304*
 "Espresso Lombardia", 598
 "Espresso Sicilia", 319, 477
 "Espresso Toscana", 319, 477
 "Essence", 167, 478, 481
 "Essex Trader", 274, 470
 "Essi Kristine", 73, 471
 "Esso Baltica", 129-133*
 "Esso Bangkok", 166, 439-442*, 478, 525*
 "Esso Baltica", 476
 "Esso Bernica", 474
 "Esso Bombay", 414, 439, 478
 "Esso Castellon", 274, 483
 Esso Transport and Tanker Co., 439
 "Estado do Amazonas", 68, 472
 "Etsuyo Maru", 320, 481
 "Euphrates Maru", 319, 480
 European Unit Routes Ltd. (E.U.R.), 385
 "Europi Ferry", 48, 495*
 Europort '68 Exhibition, 423-424*
 Euskalduna de Construcción y Reparación de
 Buques S.A.—290-292*, Liberty Replace-
 ment Ship Design, 39-40*
 Eustathio, M., 66
 "Evamo", 466, 474
 Evans, J. T., 617
 Evaporators, Braby, 158
 Everard, F. V., 66
 "Ever Faith", 167, 480
 "Ever Reliance", 320, 484
 Exhibitions:—
 Australian Container Exhibition, 171
 Container Exhibition, 288, 324
 Europort '68, 423-424*
 Freight Container and Container Handling, 600
 Leningrad Fishing Exhibitions, 356
 Oslo Shipping Exhibition, 13, 88-96*, 122
 Posidonia '69, Greece, 326
 Ships' Gear International, 203-205*
 "Exmouth", 611*
 Expanded Rubber and Plastics Ltd., 112
 "Expressen", 178*

F

Fairbanks Morse:—
 Engines, 17
 Engine Building Programme, 487
 Machinery for U.S. Tankers, 266-267*
 Progress During 1968, 538
 "Fairway Gillie", 548
 "Faialse", 46
 "Falcon", 364, 482
 Falcon Tankers Inc., 266
 Fans Centaxial, 344
 Fans, Meco, 157*
 Farbenfabriken Bayer A/G, 155
 Farnie, J., 391
 Farrell Lines, 373
 "Farrington", 46
 "Fanstina", 481, 487
 Fawick Airflex Clutches, 78
 "Fax", 154
 "Federal Negara", 11, 480

* Illustrations

"Federal St. Laurent", 10, 472
 Feilden, G. B. R., 332
 "Fennis", 50
 Fermland, 540
 Ferguson and Timpson Ltd., 34, 101, 126
 Ferguson Brothers (Port Glasgow) Ltd., 326, 418,
 451
 " Fernando", 474
 " Fernando-Escanell", 166
 " Fergulf", 482
 Ferranti Ltd., 566
 Ferries:—
 Catamaran Ferries, 504
 " Denmark", 283-286* (G.A. and Machinery
 Drawings)
 "Drottingen", 121*, 513*
 "Haide Transporter", 331*
 " Innsfallen", 558
 " Koningin Julianne", 360-362*, 364A, 364B,
 (G.A. and Machinery Drawings)
 "Leinster", 545
 " Munster", 141-144* (G.A. Drawings)
 Passenger Vehicle Ferries of 1968, 513*
 "Princess Margaret", (Hovercraft), 272-273*
 "Prinsesse Margrethe", 325*
 "St. George", 225-230* (G.A. and
 Machinery Drawings)
 "Sound of Islay", 373
 Tirrenia S.p.A. Newbuilding Programme, 298*
 See also Survey of European Ferries and
 Services, 43-57
 "Ferry Hankyu", 477
 Fiat:—
 Engines for Norwegian Ships, 287
 Large-bore-engines, 325
 New Italian Licensee, 17
 Polish-built Engines, 74
 Progress During 1968, 536
 SEPA Automatic Control System, 342, 583-
 584*
 Series of Refrigerated Ships for Soviet Union,
 342*
 Service and Maintenance Experience Applied
 to Engine Development, 253-254*
 1 060mm-bore Engine, 231, 622-624*
 Fiebel, A. M., 11
 Fielden Electronics Ltd., 394
 "Filefjell", 319, 474
 "Filipinas", 473, 414
 Filters:—
 Fipoca, 576*
 Reilmot (London) Ltd., 576*
 Sofrance, 90
 Vokes, 633*, 189-190*
 Winslow, 446, 577*
 "Finlandia", 52
 Finnboda Varf, AB, 86
 "Finclipper", 243
 "Finneagle", 243
 "Finforest", 243
 Finnlines Ltd., 243
 "Fishbourne", 46
 Fishing:—
 All-aluminium Boat, 548*
 Costs of Hull Construction, 453-454*
 C.P. Propellers for Stern Trawlers, 458
 Elliott Hydroplot Computing System, 128
 Leningrad Exhibition, 356
 Sea Scribe Echo Sounder, 258
 Spanish Industry, 455-456*
 Stork-Werkspoor Engines for British Trawlers,
 294
 U.K. Fishing Fleets to Merge, 375
 Weather Station, Icelandic, 372
 W.F. A. Loans, 174
 See also Special Feature, 451-458*
 Fishing Vessels:—
 "Boston Lincoln", Non-freezer Stern Trawler,
 136-137*
 "Benguela", Research Vessel, 456*
 "Chipea", Research Vessel, 308
 "Les Christine", Ferro-cement Trawler, 233*,
 522
 "Kongo Maru", Large Stern Trawler, 327
 "St. Jasper", Trawler, 451-452*, 326, 84*
 "Selvag Senior", Seiner, 36*
 Flange Connectors, 258
 Flensberger Schiffbau Gesellschaft, 544
 "Flinders Bay", 232, 469
 "Flowergate", 463*, 467, 483, 612*
 "Flyrefisken", 50
 Formica Ltd., 112
 "Fort La Reine", 466, 473
 "Foxforco", 540
 "Fontini Carras", 274, 479
 Foundry Suppliers Ltd., 207
 "Fox", 154
 "Francisco I. Madero", 10, 478
 "Franz Malmros", 477
 Fraser-Smith, P. D., 568
 "Fred Scamaroni", 52
 Freedom Vessels, see Liberty Ship Replacements
 "Free Enterprise I", 48
 "Free Enterprise II", 48
 "Free Enterprise III", 48
 "Freeport", 414, 474
 "Freshwater", 46
 "Fribo", 466, 473
 "Friderik Nansen", 11, 122, 289, 482
 "Frontenac", 166, 472
 "Frubel Oceanica", 10, 472
 "Fructidor", 473, 466
 "Frumentor", 319, 477
 "Fuji Maru", 10, 480
 "Fuji Maru No. 5", 478
 "Fuukuyama Maru", 320, 480
 Furness Shipbuilding Co., 1, 72, 195
 Furness-Smiths Dock (Trinidad) Ltd., 295
 "Fuurya Maru", 274, 287*, 480
 "Fusedale, H.", 111*
 "Fuushima Maru", 467, 479
 "Futurety", 330*
 "Fly", 50

G

" Gaelic Ferry ", 48
 " Galia ", 98-99*
 Gallois, J., Articles on S.E.M.T.-Pielstick Engines, Special Survey, February
 Gamlen Chemical Co. (U.K.) Ltd., 140, 174, 259, 308*, 355, 400, 404, 582, 583, 636
 Gauging Equipment, Teledep, 355
 " Garcia Munte ", 483
 " Garcilaso ", 598
 Gardner Sir G., 148
 " Gas Lion ", 275, 471, 499*
 Gas Turbines:—
 Brown, Boveri-Sulzer Turbo Machines Ltd., 549
 Canadian Westinghouse Co., 127
 Caterpillar Tractor Co., 618*
 COGOG Installation in " Exmouth ", 611*
 Finnish Navy CODAG Installations, 324, 435
 Gas Turbine Manual, 452
 Kongsberg Vapenfabrik, 257*
 Lubricants for, 207
 Progress During 1968, 538*
 " Norman McCleod Rogers ", 174
 Prospects for, 459
 U.S. Conference, 13
 Gates Europe S.A., 354
 " Gaucho ", 472
 Gazocean Group, 115
 Gdynia Shipyard, 136
 Gearbulk Ltd., 417
 Gearing:—
 Modern Wheel Drive Ltd., 112, 356*
 Weser A/G, 111
 Geddes, F. I., 190
 " Gedser ", 52
 " Gedser II ", 10, 474
 Geiger Torsiograph, 139-140*
 Geislanger Couplings, 78
 " Gelmir ", 274, 483
 G.E.C.-A.E.I. Electronics Ltd., 158
 General Electric Co. (U.S.A.), 374
 G.E.C.-Elliott Automation Ltd., 580
 G.E.C.-Marconi Electronics Ltd., 580
 G.E.N.E.M.A., 587
 General Steam Navigation Co., 373
 Generators:—
 Bergen, 631*
 Gas Turbine, 618*
 Pelapone, No-brake Set, 69
 Shaft-driven, 19-20
 Sulzer 250mm-bore Engines, 445-446*
 " Genève-Lykes ", 484
 " Genku Maru ", 319
 " Gennargentu ", 54
 " Gentile da Fabriano ", 54
 George Clark and N.E.M. Ltd., 276, 487, Special Survey, September
 George E. Sharp Report, B. and W. Survey, May
 " George N. Papalio ", 68, 119*, 470
 " Georgiana ", 11, 480
 Geris Corp., 207
 " Germa Lord ", 122, 482
 " Germek ", 122, 482
 " Gervala ", 598
 Gesellschaft für Kernenergieverwertung in Schiffbau und Schiffahrt G.m.b.H. (GKSS), 420
 " Gibralter Maru ", 467, 478
 Giessen, Van Der, 339
 Gilchrist A., 817
 " Gimleksog ", 364, 484
 " Gino Maru ", 166
 GKN Pilgrim Nos. 90
 Glacier Metal Co., 18, 191, 204
 " Glafkos ", 477, 486
 Glanville, J. D., Article on George Clark and N.E.M. Ltd., Special Survey, September
 Glarus, 475
 Gleeson, D. T., 434*
 " Glen Avon ", 578-580*
 " Glen Sannox ", 48
 " Gliwice II ", 414, 472
 Globe Eng. Works Ltd., 33, 570*
 Globitok Tankers Ltd., 167
 Glocon Valves, 344
 " Glomar Challenger ", 392
 " G. M. Livanos ", 275, 471
 Godley, A. M., 148
 " Golar Bow ", 479
 " Golar Freeze ", 364, 482
 " Golar Frost ", 467, 482
 " Golar Netz ", 11, 482
 " Golden Chalice ", 467, 480
 " Golden Condor ", 364, 484
 " Golden Cross ", 598
 " Golden Gate Bridge ", 414, 468, 479
 " Golden Petrel ", 364
 " Gondomar ", 274, 483
 Goodall, F. J., 66
 Gosta Berlin, 52
 Gotaverken —101, 511, 612
 Chemical Carrier Conversion, 343
 " Flowergate ", 483*
 Highest-powered Engine, 173*
 " Obo Prince ", 349-350*
 Royalties on Arendal Techniques, 325
 " Sea Star ", 516-517*
 Goulandris, B. P., 323, 610
 Gowranbank, 471
 " Graigfon ", 466, 471
 " Grangemouth ", 319, 471
 Graviner (Colbrook) Ltd., 42, 341*, 402
 " Great Britain ", 602
 Green, R. and H. and Silley Weir Ltd., 95, 298
 Greenwell, T. A., 389, 619
 Gresser, P. F., 619
 " Greta Thulin ", 274, 483

" Gripen ", 56
 " Grischuna ", 187, 480
 Grit Blasting Equipment, 193
 Grosvenor, Richard and Co., 394
 Grover, A. C., 11
 " Grunwald ", 10, 472
 Gryf ", 56
 Guanti, E., Article on Italian Shipbuilding, 523-524*
 Gubser, W., 217*

H

Hadfields Marine Paints Ltd., 304, 449
 Haggqvist, S., Article on Swedish Shipbuilding, 511-512*
 " Haida Transporter ", 319, 331*, 472
 " Haimein ", 475
 Hakodate Dock Co., 418, 488
 " Hakone Maru ", 319, 333-336*, 468, 480, 581*
 " Hakuunbun ", 481
 Hall, J. and E. Ltd., 208
 Hall Russell and Co., 173, 548
 " Halsingsborg ", 50
 " Halsskov ", 50
 " HAM 308 ", 364, 476
 Hamburg America Line (HAPAG), 230
 Hamling, Thomas and Co., 451
 " Hammerhus ", 50
 " Hamno ", 275, 483
 " Hampton Ferry ", 46
 Hamworthy Engineering Ltd., 42, 94, 157, 158, 419, 624*, Special Survey, September
 " Hansel ", 475
 Hansen, Knud E., 613
 " Hanyang ", 166, 476
 Hapag-Lloyd Container Line, 408, 585
 " Har Addir ", 10, 195-198*, 471
 " Har Saggi ", 414, 471
 Harland and Wolff Ltd., 60, 95, 167, 375
 Appointments, 190, 241, 434
 Article by J. F. Mallabar, Special Survey, September
 Building Dock, 231, 610
 B. and W. Engine Order, 417
 Engine Bedplate Repairs, 438*
 First U.K.-super-large-bore Engines, 547
 Javlin Bulk Carrier Orders, 172
 New Orders, 126
 Re-organisation of, 389
 Thyristor-controlled Motor, 633
 " Harlov ", 466, 472
 " Harmattan ", 329
 " Harpagus ", 329
 " Harpalycus ", 329
 " Harpoon ", 329
 Harrison, J. and C., 242, 329
 " Harukawa Maru ", 11, 481
 " Harukaze Maru ", 10, 479
 " Haruna Maru ", 319, 327, 333, 466, 468, 477, 479
 " Hashihama Maru ", 479
 Hatch Covers:—
 Cargo Dynamics Ltd., 16, 96, 306, 356, 423
 Deutsch Greer Marine, 23
 Kvaerner Brug, 99, 158*, 612
 MacGregor, 5, 173, 204, 235, 418
 Associated Cargo Gear A/B (ASCA), 612*
 " Haverton ", 364, 471
 " Havmoy ", 122, 206*, 484
 " Hawaiian Princess ", 468
 Hawthorn Leslie (Shipbuilders) Ltd., 322
 Hay and Smart (Projects) Ltd., 629*
 " Hayashikane Maru No. 2 ", 477
 Hay's Wharf Ltd., 74
 " Hazim ", 128, 388*
 Heat Exchangers:—
 Alfa-Laval, 355*
 Hydrovane, 394
 Heat Transfer Fluids, 403
 Heavy-lift Ship, " Magician ", 605-610*
 " Hebrides ", 48
 Heidenstam, F. H. S., 617
 " Heimdal ", 50
 " Helene Delmas ", 274, 473
 Helix, A. S., 78
 " Hellenic Renaissance ", 414, 501
 Hellenic Shipyards Ltd., 168, 192*, 501
 " Hemlock ", 10, 480
 " Hemsejell ", 364
 Henry, James J., 417
 Hepper, A. E., Article on Upper Clyde Ship-builders Ltd., Special Survey, September
 " Heranger ", 364, 484
 Herd and Mackenzie, 454
 Herlifson, Sigurd and Co., A/S, 349
 " Hermacs ", 54
 " Hien Maru ", 477
 Hill, Charles and Son Ltd., 145
 Hill, Temperature Engineers Ltd., 571
 Hill, T., 78
 Hinckley, F. T., 390
 Hippie, M. W., 617
 Hirsh-Brown Ltd., 354
 Hitachi, S. B. and Eng. Co.:—
 Afloat Repairs of Stengas, 564
 Bulk Carrier Series, 347*
 " Kashu Maru ", 416*
 " Kongo Maru ", 327
 Repair Agreement, 145
 Repair Docks, 520
 " Wayway ", 548*
 Hjelset Motorfabrik, 78
 Hoboken, Belgium, 374
 Hodge Clemcu, Ltd., 295
 " Hoegh Orrie ", 473
 " Hoegh Rider ", 10, 479

" Hoegh Rover ", 167, 479
 " Hokoku Maru ", 477
 " Hokusei Maru ", 224, 480
 " Holland Park ", 122, 476
 Holmes, Charles D., 123, 128, 294
 Holmes, W. C. and Co., 404
 " Holthav ", 68, 472
 " Holyhead Ferry I ", 46
 " Homei Maru ", 466, 477
 " Honmoku Maru ", 319, 477
 Hood, E. M., Article on American Shipbuilding, 529-530*
 Hoop, De, 300
 " Hopewark ", 474
 " Horin ", 482
 Horst, Van Der, Enterprises Ltd., 111
 Horst, Van Der Porus Krome Ltd., 555, 42
 " Horton ", 331*
 " Horton ", 540
 Hose, Floating, 111
 Hosie, R. M., Article on Cylinder Lubrication, 149-150*
 Houseman and Thompson Ltd., 152, 404
 Houlder Group, 470, 115, 232
 " Houston ", 620*
 Houston, M. C., 498*
 Houtribdijk Pompen N.V., 122, 187
 Hovercraft:—
 British Hovercraft Corp., 16
 Canadian Coastguard, 174
 Classification of, 233
 Economics of, 399-400, 559-560*, Special Survey, September
 Hoverloyd, 324, 600
 Hovermarine Ltd., 444
 Hoverpallets, 16
 " Mountbatten " Class SRN-4, 45*
 Navigation Survey, 487
 Operating Experience on B.R. Hovercraft, 375, 627-628*
 " Princes Margaret ", 627-628*
 SRN-4 Enter Service, 267-273*
 Vosper Thornycroft Design, 444
 Howaldswerke Deutsche Werft, A.G., 89, 392, 544, 584
 Howson, Charles and Co., 295
 " H. R. MacMillan ", 479
 Hudson Eng. Co., 400
 Hugall, A. G., 389
 Hughes, F. A. and Co., 188, 341
 Hull Gates, Shipping, 547
 " Human ", 388*
 " Humberside ", 466, 471
 Humber-St. Andrews Eng. Co., 343
 " Humboldt ", 68, 115-119*, 232, 473
 " Hundested ", 52
 Hungarian Shipyards and Crane Factory, 351
 Hunter, A., 434
 Hunter, R. H., 582
 " Hyde Park ", 540
 Hydrasearch Co. Inc., 258
 Hydraulics and Pneumatics Ltd., 203
 Hydrofoils:—
 Condor Ltd., 400
 Economics of, 559-560
 " Expressman ", 178*
 Supermar, 395
 Hydraulica Inc., 260, 602
 Hydovane Compressor Co., 394
 " Hypolite Worms ", 466, 473

I

Ibsen, R., 191
 Icebreakers:—
 " Varma ", 634*
 " Ichizan Unzen ", 479
 Iorganic (Thorn Group), 260
 I. H. C. Holland, 417
 " Ikushima Maru ", 11
 " Ikushima Maru No. 1 ", 481
 " Ikushima Maru No. 2 ", 481
 " Ilimator ", 52
 " Ilse Klint ", 297*
 " Im ", 467, 480
 IMAS '69 (International Marine and Shipping Conference), 74, 299-300, 431
 " Impala ", 385-388*, 468, 561*
 Inca Pachacutec, 540
 Inca Roca, 598
 Inca Tupac Yupanqui ", 364, 483
 Indian Mail, 484
 Indusbank, 232*
 Industrial Sales Co., 94
 Industrial Sealants Ltd., 450
 Industrie Engines, 38
 Inertia Switch Ltd., 110
 Infield, B. J., 617
 Ingalls Shipbuilding, 266
 Ingham, B., 190
 " Initiator ", 575
 " Innisfallen ", 545, 558
 Institution of Engineers and Shipbuilders in Scotland, 73
 Insulation, Rockwool, 636
 Interlas Welding Sets, 258*
 International, 589
 International Computer Services Ltd. (ICSL), 577
 International Hi-Press, 571
 International Marine Radio Co., 257
 International Maritime Carriers Ltd., 347
 International Paints Ltd., 148
 International Paints (Exports) Ltd., 449
 " Inverness ", 10, 471
 " Invicta ", 48
 " Ionnis Zafiricos ", 10, 477
 " Ionic Ferry ", 50

THE MOTOR SHIP

"Irkusk", 475
 "Irma Delmas", 598, 599*
 "Iron Endeavour", 598, 601
 "Iron Hunter", 550*
 "Ise Maru No. 12", 479
 Ishikawajima-Harima, H.I. Co.:—611
 Aioi Repair Dock, 343*
 Canadian Vickers Repair Agreement, 295
 Cargo Oil Self-stripping System, 302
 Compressors, Gas, 636
 Engine Building, Special Survey, December
 "Eso Bangkok", 439-442*
 "Freedom", Vessel, 75-78*. See also Liberty
 Ship Replacements
 "Japan Ace", Special Survey, December
 Kure Building Dock, 174
 Kure Merger, 18
 Nuclear-powered Ship, 553*
 Order for Tanker of 370 000 tons, 406
 Propulsion Units, Duckpeller, 447*
 "Univers Ireland", Special Survey,
 December
 "Voo Shee", 600
 "Isaura", 475
 ISIS:—
 Computer Services Ltd., 304
 Monitoring Systems, 446
 "Islas Galapagos", 476, 486
 "Isle of Islay", 147
 "Isthmia", 54
 Isogai, M., Article on Japanese Diesel Engineering, Special Survey, December
 Italcanteri S.p.A., 288, 298, 306, 523-524*
 "Italian Reefer", 466, 472
 Ital sider Crankshaft Production, 18
 "Ithaki", 466, 471
 "Ito Harn Maru No. 1", 467, 479
 Ivaldi and Generale S.N.C., 323
 "Ivy", 10, 478

"Junsho Maru", 320, 481
 "Jujo Maru", 480
 "Juri Kostikow", 482
 "J. V. Clyne", 479
 "Jzmail", 475
 "15-1 Jet Oktjabra", 482

"Kras", 414, 484
 "Krasnoyarsk", 466, 473, 598*
 Kremer, D. W., Sohn, 306
 Kristian Birkeland", 275, 473
 Kristian Jabsens Rederi, A/S, 18
 "Kristian Brovig", 10, 477
 "Kronprins Harald", 54
 "Kronprinsesse Ingrid", 52
 K.S.B., Bow Thrusters, 604*
 K. S. Paul Products Ltd., 260
 "Kujawy", 482
 "Kunguland", 109
 "Kunimitsu Maru", 319
 Kure Shipbuilding and Eng. Merger with I.H.I., 16
 "Kurogami Maru No. 1", 478
 "Kurogami Maru", 467, 481
 "Kurushima Maru", 479
 Kuwait Oil Co., 128
 Kvaerner Brug, 156*
 Kvaerner (U.K.) Ltd., 612
 Kyle, R. C. and Co., 452
 "Kyleakin", 48
 "Kyofuku Maru", 481
 "Kyokuei Maru No. 1", 481
 "Kyoryu Maru", 481
 "Kyoshin Maru", 10, 481
 "Kyoto Maru", 467, 480
 "Kyowa Maru", 467, 481
 "Kyung Yu", 166, 476

L

"Lady Caroline", 147
 "Lady Margaret", 504*
 "Laetitia", 166, 474
 Laid-up Ships, 375
 "Lajes", 319
 "Lake Manitoba", 319, 472
 "Langeland", 54
 "Langwardersand", 166, 468, 473
 "La Rabida", 414, 430*, 483
 "Lars Mikheenko", 475
 LASH-type Ships:—384
 Hatch Covers, McGregor, 418
 LASH Systems Inc., 85, 321
 Second 43 000-ton Ship, 321
 Laskey, Dr. N. V., 75
 "Lasse", 52
 Laurence, Scott and Electromotors Ltd., 404
 Lauzon Shipyards, 72, 241
 Lawrie C., 434
 Leak Detector, 41
 "Lee Christine", 233, 522*
 "Lee Tai", 477
 Lee, W. Y., 617
 "Leinster", 545
 "Leknes", 319, 474
 "Leningorsk", 475
 "Leopard", 52, 122, 473
 Letters to the Editor, 100, 399-400, 446, 503,
 559-560
 Levante, Union Naval de, 287, 602
 "Letitia Lykes", 484
 Lewis, John and Sons, 635
 Liason, A. M., 78
 Liberty Ship Replacements:—
 Concord-Class, "Sylvia Cord", 382-384*
 (G.A. Drawings)
 Oxford design, "Sheaf Crest", 14, 183-
 186*
 Euskalduna, "Santa Fe", Class, 39-40*
 (G.A. Drawings)
 Pionier Class, "Jag Dev", 246-247*
 Freedom Vessels:—
 Cathodic Protection for, 450, 549
 Charters' Assessment, 526*
 Design Developments, 75-78*, Operational
 Safety Assessment, Special Survey, December
 Safety Features, 323
 List of Contracts, 57A-58
 Order Book, 231
 SD 14—95*, 119, Article by C. Longbottom,
 Special Survey, September
 Greek-built, 72*, 168*, 288, 501-503*

Liferafts:—
 Beaufort, 91
 Lightweight, 394*
 Servicing Stations for, 128
 Tangen, 89
 Lifesaving Equipment:—
 Bibby, 208
 Brucker Survival Capsule, 182*
 Lifeboat Release Gear, 341
 Shermuly, 205
 Solas Marine Equipment, 257. See also
 Liferafts
 Liffe Dock Yard, 101
 Lighting", 376, 469
 "Liman", 475
 "Limhamn", 56
 "Limonosovo", 472
 Limpet Asbestos Process, 157
 Lindholmens Varv, AB, 277
 "Ling Yung", 11, 169-171*, 481, 565-567*
 "Lion", 48
 "Lionel", 482
 Lips, N. V., 487
 Liquid Gas Anlagen Union G.m.b.H., 449, 96
 Liquid Systems Ltd., 155
 "Lisa Brodin", 122, 484
 "Lisana", 167, 481
 "Lisite", 274, 472
 Lisnave, 241, 518-519*, 562
 Lister Blackstone Engines, 154, 259, 327
 Livanov, G. P., 488
 Lloyd Roach Engineering, 103
 Lloyd's Register of Shipping, 67, 233, 359, 547,
 577, 524
 "Lochallow", 48
 Lockhart, R. G., 148

THE MOTOR SHIP

Lockheed Precision Products Ltd., 122
 Lockwood, Torday and Carlisle Ltd., 562
 "Lomonosovo", 166
 London Graving Dock Group, 146, 391, 563, 619,
 621
 Longbottom C., Article on SD-14, Special Survey,
 September
 "Lord Warden", 46
 "Los Alamos", 619*
 Loyne Ltd., 403, 619
 L.T.H. Electronics Ltd., 207
 Lubecker Flender-Werke, 353, 544
 Lubeck Linie, AG., 353
 Lubrication:—
 Courses on, 73
 Cylinder, 149-152*
 Gas Turbine, 207
 Research Centre, 308
 Super-large-bore Engines, 157
 Lucas Hydraulic Pump Motor, 354*
 "Ludogoretz", 467, 481
 "Luis Angel Arago", 320
 "Luisita Botelho", 69, 84*, 474
 "Lujua", 320, 483
 "Luminous", 292, 467, 483, 599*
 Lusol Ltd., 308
 "Lustrous", 292, 364, 483, 525*
 Luzon Stevedoring Corp., 305
 Lyte Shipping Co., 127
 "Lympington", 46
 Lyne, R. E. A., 399-400, 559; Article on Economics
 of Hovercraft, Special Survey, September
 "Lyonia Golikow", 319, 475

M

McDougall, A., Article on British Shiprepairs,
 Special Survey, September
 McGarvey, D., Article on Rôle of Unions in
 British Shipbuilding, Special Survey,
 September

McGregor, 5
 "Arevida", Hatch Covers, 63
 LASH Ships Hatch Covers, 418
 Magromover Transport System, 424*
 "Manchester Challenge" Hatch Covers, 428
 Slab-type Covers, 409
 Ungar Stern Gantry, 456
 Machinery in Ships Completed, 2*, 160*, 312*, 460*
 McIver, T., Article on Swan Hunter Group,
 Special Survey, September

McKelvey, E. J., 190
 Mackesy, A. C., Article on Swan Hunter Repair
 Division, Special Survey, September

Mackie, E. D., 241
 McLay, T. C., 190
 McMullen, John J., Associates, 92
 McWilliam, D. A., 617
 Madan, Charles S. and Co., 110, 448

"Magdala", 473
 "Magician", 166, 471, 605-610*
 Magromover Transport System, 424*
 "Maheno", 466, 471
 "Mahsud", 167, 277-280*, 484
 "Maid of Kent", 46
 "Maid of Orleans", 48
 "Maihar", 167, 277-280*, 484, 494*
 "Makarska", 484

Malabar, J. F., Article on Harland and Wolff Ltd.,
 Special Survey, September

"Malmanger", 11, 79-83*, 156, 484
 "Malmöhus", 56
 Malta Drydocks Group, 72, 147, 520, 562

M.A.N.:—
 Automatic Shaft Generator in the "Elbe
 Express", 585-586*

Cylinder Overhauling, 264
 Engines Uprated, 3
 Flexible Mountings on "Koningin Juliana",
 248-252*
 "Koningin Juliana", Machinery Installation,
 360-362*, 364A

Medium-speed Engines in "Malmanger", 79-
 83*

Most Powerful Diesel Engine, 199*
 Oslo Exhibition, 122
 Progress During 1968, 536
 Super-large-bore Engines, 239-240*
 World's Largest Diesel Engine, 114
 Vickers-built Engines, 172
 520mm-bore Engine Tests, 282*

"Manapouri", 319, 480, 494*
 "Manchester Challenge", 173, 364, 425-430*,
 468, 471, 561*

"Manchester Concorde", 425
 "Manchester Courage", 425, 469, 598, 600
 Manchester Drydocks Ltd., 521
 Manchester Liners Ltd., 42, 173, 181, 425, 600

"Mandarincore", 11, 482
 "Mangelia", 479
 "Manitou", 364, 474

Manning Scales:—
 General Purpose Crews, 113
 General Purpose Crews for Container Ships,
 407

"Manoora", 469
 "Manuel Campos", 274, 483
 Manotherm, N. V., 147

"Manx Maid", 48
 "Maratha Envoy", 167, 479
 "Marat Kazay", 475

"Mar Caribe", 97-98*, 495*
 Marconi Marine, 91*, 127, 155, 203, 260, 355, 450,
 572, 635, 636

"Mare Dorico", 477
 "Maren Mois", 52
 "Mare Picano", 466, 477

"Margaret Cord", 414, 480
 "Mariam", 620*

"Maria Nigra", 82
 Marianne", 598
 Marianne Thostrup", 414, 472, 490*
 "Marie Delmas", 414, 473
 Marietta Boilen", 166, 488, 474
 "Mergor", 540
 "Marilyn L.", 186
 "Marina", 401
 Marin, Chris, AB., 528*
 Marine Industries, 325
 Marine Moisture Control Inc., 110
 Marinene Hovedverft, 127
 Marine Radio Company, 204
 "Marinula", 472
 Maritime Fruit Carriers Ltd., 348
 Maritime des Chargeurs Reunis, 289
 "Maritime Glory", 319, 478
 Maritime Maintenance Pty. Ltd., 563
 Maritime Overseas Corp., 196
 "Maritime Queen", 166, 477
 "Marka", L., 10, 477
 Marketing Services (Birmingham) Ltd., 191
 "Markist", 475
 "Marola", 540
 Marr, A. J., 389
 Marshall, A. B., 389
 Marshall Ltd., 112
 "Mary", 319, 474
 Maryland, S. B. and Dry Dock Co., 343, 562
 Maskiner, Jako, A/S, 90
 "Matawa", 167, 480
 "Matsumine Maru", 479
 "Matsumaya Maru", 479
 "Matura", 38, 177*
 Mechanical Engineers, Institution of, 128, 488
 Mechanik Rybaczuk, 482

Mediterranean", 364, 471
 Medora", 480
 Medium-speed Engines (See Engines)
 Meek, M., 595
 "Megalochari", 54
 "Megara", 401-402*, 480
 Megator Pumps and Compressors Ltd., 571
 "Meiji Maru", 10, 477
 "Meiko Maru", 69, 481
 "Melania", 328*
 "Melchor Ocampo", 467, 478
 "Meliton", 69, 478
 "Melrose Abbey", 46
 Melrose, W. G., 332
 Merian", 414, 474
 Mersey Docks and Harbour Board, 449
 Messer Griesshain, 571*
 "Meta", 477
 Metalock (Britain) Ltd., 191
 "Meta Reith", 364, 474
 Metcalf, J., 332
 Metco, 103
 "Methane Princess", 405
 "Methane Progress", 405
 Metric Standards, 265
 Metric Cammell Containers, 356
 Metstak Containers, 41*
 "Mette Mois", 52
 "Metula", 478
 "Meyenburg", 475
 "M.G. Tsangaris", 467, 478
 "Miaoulis", 54
 "Michalakis", 69, 474
 Micheli Bearings Ltd., 145, 549
 "Midosi", 274
 "Milford Haven", 548
 Millar Betabite, 635
 Mills and Knight, 295*
 Milne, J., 66
 "Milos Matyjevic", 69, 478
 Mimic Diagrams and Electronics Ltd., 635
 "Mimis N. Papalios", 470
 "Mirencu", 414, 483

Mirries:—
 Article by Dr. J. A. Pope, Special Survey,
 September
 Medium-speed Engines, 27-30*
 Progress During 1968, 537
 Mitchell, C. C., 617
 Mitchell, Dr. D. S., 390
 Mitsubishi Heavy Industries:—
 Afloat Welding, 243
 "Hakone Maru", 333-336*
 Swing Derricks, 171
 Engine Production, 230
 Sulzer RND105 Engine Production, 218-224*,
 366
 "Tai Ning", 419
 300,000-ton Capacity Berth, 127
 "Mitsui Maru No. 3", 479, 479
 Mitsui, S.B. and Eng. Co. Ltd., 548
 Chiba Building Dock, 217*, 549*
 Concord Liberty Ship Replacements, 382-
 384*
 First Japanese B. and W. K-type Engine,
 488*
 Shaft Alignment System, Special Survey,
 December
 "M.O. 10001", 476
 "M.O. 10002", 476
 "M.O. 10003", 476
 "M.O. 10004", 476
 Mobile Oil Corp., 294, 547, 587
 Modern Wheel Drive (MWD), 356*
 "Moenjodaro", 364, 484
 Moller, Einar, Article on Turbochargers, 179-180*
 Moller, K., Article on Machinery Requirements,
 B. and W. Survey, May
 Monfalcone Shipyard, 288*
 "Marica, R.", 476
 "Monika Wiards", 466, 474
 Monsanto Chemicals Ltd., 403
 "Mona Calpe", 54
 Montaigle", 466, 472
 "Montana", 484
 Monteleon", 602
 "Montesa", 430
 Monte Zapola", 467, 483

"Monte Zaraya", 167, 483
 "Montiron", 319, 477
 "Montrose", 320, 481
 "Montsoreau", 473
 Moorside Components, 96
 Morcom, S.A.R., 66
 Moreton Bay", 469
 "Moriana No. 300", 467, 484
 "Mosel Express", 408, 469, 540
 Mosgulf Shipping Co., 321
 Moss, G. S., Article on Cammell Laird, 496-497*
 Moss Tankers Ltd., 282
 "Mostangen", 481
 "Moston Maru", 479
 "Mostun Sanko", 487
 Mostad Verksted, 90
 Motor Ships Recently Completed, 10-11, 68-69,
 122, 168-167, 274-275, 319-320, 414, 466-
 467, 540, 568
 "Mount Katherine", 166, 471
 Mountstuart Dry Docks Ltd., 296
 Mountstuart Jefferies and, Ltd., 145
 Muller, H., 399
 "München", 414, 474
 "Munkund", 11, 484
 "Münster", 122, 141-144*, 474, 513*, 545
 Muntz, Alan and Co., 572
 "Murex", 474
 "Murmansk", 166, 297*, 473
 Murphy, Capt. F. C., 389*
 Murray, B. D., 332
 "Musashi Maru", 274, 319, 478, 480
 "Musashino Maru", 479
 M.W.M., Duke of Holland Machinery
 Installation, 543
 "Myrina", 259*, 471

N

"Nacelia", 414, 471
 "Nadine", 319, 479
 "Nagamasu Maru", 478
 "Naikai Maru No. 11", 481
 Nakskov Skibsværft, 61
 "Nalanda", 467, 484
 "Nanri", 274, 482
 "Naniwa Maru No. 68", 598
 "Nanny", 11, 483
 Napier, D. and Son Ltd., 69, 374
 "Napoleon", 52
 "Narval", 466, 473, 482
 National Association of Marine Engine Builders,
 59
 National Bulk Carriers, 418
 National Maritime Museum, 327
 National Physical Laboratory, 374
 National Research Development Corp., 407
 Nauteknik, A/S, 89
 Naval Charts, 72
 Naval Shipbuilding in U.K., Special Survey,
 September
 "Navem Piratini", 472
 Navigation Equipment:—
 B.O.T. Specification for Radar, 390
 Decca, 90*, 110*, 111, 158, 602, 636
 G.E.C.-A.E.I. Electronics Ltd., 158
 International Standard Electric Corp., 111
 Kelvin Hughes, 90*, 308, 447, 571*
 Marconi Marine, 91*, 155, 203, 355, 572
 Nera, 91
 Plessey, 547
 SIMRAD, 600
 Sperry, 122
 Thrice-Titan Autopilot, 260
 NEBB (Norsk Elektrisk and Brown Boveri), 96
 "Neder Lee", 480
 Negretti and Zambra Ltd., 448
 New Varac Ltd., 580
 Neilson, T., 241
 Nera Transmitting Equipment, 91
 Netherlands Dock and Shipbuilding Co.
 (N.D.S.M.):—33, 191, 192, 242
 Engine Seat Repairs on "Sydhav", 564
 Largest Afloat Joining Operation, 328-329*
 Netherlands Offshore Co., 432
 "Neverita", 476
 Newbury Diesel Engines, 74
 Newfoundland Marine Works Ltd., 145
 "New Star", 598
 "Newtown Creek", 484
 New Zealand Shipping Co., 38
 Niarchos Group, 231
 "Nichii Hukujin Maru", 598
 "Nichijo Maru", 467, 480
 "Nichijima Maru No. 5", 481
 "Nichimei Maru", 481
 "Nicholas I. Livans", 471
 "Nicholas J. Goulandris", 477
 "Nicola", 470
 "Nitaka Maru", 327, 477
 "Nikkie Maru", 479
 "Nikolai Danilov", 482
 "Nikolay Brovtsov", 475
 "Nils Holgersson", 43*, 52
 Nippon Kokan K.K.,—
 Cargo Comp Computer System, 74
 Catamaran Ferries, 504
 Soviet Order, 18
 Tsu Shipyards, 72, 547*
 "Urea Maru", 601
 Nippon Yusen Kaisha (N.Y.K. Line), 333
 Nishikawa, T., Article on Operations of "Freedom
 Vessel", Special Survey, December
 "Nisso Maru", 479
 "Nitte Maru", 10, 479
 "Nitty Maru", 10, 480
 Nobiskrug, Werft, 141
 Nobah Polar Engines, 91
 Noratom-Norcontrol, 586
 Norcontrol, A/S, 338

THE MOTOR SHIP

"Nordia", 56
"Nordland", 50
Nordline, A/S, 598
Norfolk Lijn, 541
"Norman McLeod Rogers", 127, 174
"Normannia", 46, 466, 473
Normo Engines, 631
"Novodruzhesk", 166
"Norris Castle", 287, 599
North-East Coast Institute of Engineers and Shipbuilders, 231
Norwincraft Deck Machinery, 630
"Norwave", 48, 54
Norwegian Bulk Carriers (N.B.C.), 73
Norwegian Merchant Fleet, 17, 126, 264, 288
"Norwind", 54
"Noto Maru", 598
"Novodruzhesk", 473
"Novikov Priboy", 467, 484
"Novoataisk", 274, 473
"Novotroitsk", 68, 473
Nuclear Propulsion:—
 American Container Ship Proposal, 173
 British Non-involvement, 480
 Future Prospects for, 459
Japanese First Nuclear-powered Ship, 563*
"Otto Hahn", Machinery Installation, 420-422
Progress During 1968, 538
Nyborg "50
Nyhavn", 364, 482

O
BO Vessels:—
 "Obo Prince", 320, 349-350*, 483
 "Flowergate", 463*
"Oborishte", 320, 481
"Obritra", 364
Ocean Fleets Ltd., 595
Ocean Gas Transport Ltd., 115, 289
Oceanic "126
Oceanic III", 319, 477
Ocean Splendour", 167, 480
Ocean Sprinter", 145*
Ocean Unity", 319, 480
Odin", 443-444*
Offshore Marine Ltd., 74
Offshore Services Ltd., 504
"Ohkawa Maru", 479
"Ohrmazd", 364, 471
"Okaze Maru", 479
Oil Disposal, 174
Oil Dispersal, Corexit, 257
Oil Pollution:—
 Spillage Boom, 403
 Spillage Skimming Boom, 258
"Oktjabrskoye", 475
Olds, L., 617*
"Olenegorsk", 482
Olsen, Fred., Lines, 325
Olsen-Hart, Inc., 619
"Olusha", 475
"Olympic Power", 414, 480
"Omis", 620*
Onozuka, I., Article on Japanese Shipbuilding, 489-493*, Special Survey, December
"Oranienburg", 127, 475
Ore Carriers Ltd., 70
"Oresund", 56
Drenstein-Koppel und Lübecker Maschinenbau, AG, 97
"Oriana", 145
Orient Overseas Line, 169
"Oriental Queen", 169, 565-567*
Orkney Islands Shipping Co., 635
"Orlinoya", 475
"Ornen", 50
"Ortava", 10, 70-71*, 471
"Orunda", 69, 483
"Orwell Fisher", 468, 476
"Osborne Castle", 48
Oslo Shipping Exhibition, 88-96*
Ostergaard, A., Article on B. and W. Slow-speed Engines, B. and W. Survey, May
"Osterreich", 364, 474
"Otersen", 50
"Otaru", 598
"Otto Hahn", 420-422*
"Our Maru", 319
"Our Maru No. 3", 478
"Overseas Alice", 484
"Overseas Audrey", 484
Overseas Containers Ltd., 112, 159, 172, 232, 407, 488
Owens, B., 365*

P
"Pablo Garnica", 483
"Pacific Defender", 69, 479
Pacific Marine Corp., Special Survey, December
"Pacific Skou", 414, 474
Pains-Wessex, 89
Pancean Shipping, 545*
Pao, C. C., 617
Paragraph Ships:—
 "Barbel Botten", 21-24* (G.A. Drawings)
 "Constance", 266* (G.A. Drawings)
 "Stadt Aschendorf", 545-546* (G.A. Drawings)
"Parma", 482
Parker, John Ltd., 111
"Parkin", 305-308*
"Parkhomenko", 468, 476

Parkstanton and Co, 392
Partech (Electronics) Ltd., 155
"Passat", 483
Passenger Liners Described:—
 "Boheme", 415*
 "Queen Elizabeth 2", 505-510* (G.A. Drawings)
 "Starward", 524*, 613-616* (G.A. and Machinery Drawings)
See also Ferries
"Paul Endecott", 589
"Paul Schröder", 364, 471
Paxman Davy and Co. Ltd., 112
 Ventura Engine, 403*, 572
 Engine Division, 374
Pazderski, H., Article on Polish Shipbuilding, 556-558*
Pearson Engineering Co., 344
"Pearl Venture", 69, 480
Pearson, Sir D., 390
Pearson Valves Ltd., 563
"Pedro Teixeira", 414
"Pelengator", 10, 472
"Penang Maru", 11, 481
"Peredovik", 475
Pelapone Ltd., 69
Pellegrino, Cant. Nav., 298
Perkins Engine Group, 260
Perolin Co., 147, 157
"Persimmonore", 348, 364, 482
Personal Notes, 11, 66, 148, 332, 389, 434, 458, 568, 617
"Pescaria Quarto", 467, 483
"Peter Pan", 52
"Peter Schröder", 122, 206*, 471
"Peter Vessel", 166, 472
Peters, G. D. and Co. (Engineering) Ltd., 204
Peterson, P. E., Article on Experience with S.E.M.T.-Pielstick Engines, Special Survey, February
"Petro Coco", 351
"Petro Duke", 351
"Petro Nic", 351*
"Petro Prince", 351
"Petropols", 472
"P. G. Thulin", 344
Philadelphia Resins Comp., 634*
"Phillips Arkansas", 540, 589-594*, 598
Phillips Petroleum Co., 589
Philankers Inc., 436, 589
Phoceno Sous-Marine, S.A., 563
Pielstick Engines (See S.E.M.T.-Pielstick)
Pigg, D. A., 66
Pilgrim Nuts, 90-91, 147
Moorside Components, 96
Pilot Hoists, 42
"Pimentel", 320
"Pinillos", 483
"Pinguin", 475
"Pioneer", 475
Pipework Fabrication, 153-154*
Piston Rings, Davos, 35*
"Plan de Ayala", 319, 478
"Planet", 36*, 472
Plastics Boats, Japanese Fishing Vessels, 457
"Playa Blanca", 483
"Playa Giron", 475
"Playa Naos", 483
Plenty Pumps Ltd., 548, 636
"Pilot", 275, 481
"Plessey", 547
"Plutarco Elias Calles", 166, 478
"Podhale", 482
"Podunavje", 167, 484
"Point Law", 10, 471
"Polar Brasil", 166, 473
"Polar Colombia", 10, 473
Polar Engines, 18
Polar International Marine Ltd., 400
"Polar Paraguay", 466, 473
Polar Shipping Corp., 436
"Polar Uruguay", 166, 473
Polish Remote-control System, 244*
"Pomorz", 482
"Ponce de Leon", 104-106*, 157, 484, 495*, 530*
Pontavice, J. Du., Article on S.E.M.T. Medium-speed Engines, Special Survey, February
"Pontos", 598
"Poulta", 521
Pope, Dr. J. A., Article on Mirrlees Engines, Special Survey, September
"Port Caroline", 304, 356, 395-398*, 471, 494*
"Port Chalmers", 68, 356, 395-398*, 471
Port Everglades Shipyard, 521
"Port Letta Maru", 84*, 481
Port Line Ltd., 395
"Porto", 167, 483
"Portoro", 274, 484
Port of London Authority, 373
"Portree", 48
Porte:—
 Feliztowe, 375*
 Oslo, 93
"Portsmouth Queen", 45*
"Portugal Maru", 10, 479
Port Waller Drydocks, 581
Posidonia '69, 326
Powell Duffryn Group, 66
Powerlifts Ltd., 178
Powermeter, Jungner, 412
"Preciosa", 10, 471
"President Fillmore", 484
"President McKinley", 484
Pressure Valve Vents, Whessoe, 41
"Priam", 595
Priming Systems, Prima-Vac, 400*
Prince of Wales Dry Dock Co., 91
Princess Aurora", 274, 481
Princess Margaret (Hovercraft), 627-628*
"Princess Astrid", 275, 472
"Prins Albert", 50
"Prins der Nederlanden", 166, 478
Prinses Beatrix", 54
"Prinses Christina", 69, 476

"Prinses Irene", 54
Princess Josephine Charlotte", 50
Princes Margriet", 54
Princes Paola", 50
Princesse Anne-Marie", 50
Princesse Benedikte", 50
Princesse Elisabeth", 50
"Princesse Margrethe", 52, 319, 325*, 477
"Princesse Ragnhild", 43*, 54
Products Carrion:—
 "Esso Baltica", 129-133*
 "Esso Bangkok", 439-442* (G.A. Drawings)
 "Lustrous", 292*
"Proliv", 475
"Prometheus", 10, 478
Propellers:—
 Controllable Pitch, 19-20, 210, 303-304*
 Escher-Wyss C.P., 120
 Economics of C.P. Propellers for Trawlers, 458
Kamewa C.P.-Propellers, 308
Lips N.V., 487
Nickel Alloy, 233
Norwegian C.P. Manufacturers, 78
Removal of, 242*
Seven-bladed, 487*
Slack and Parr, C.P., 035*
Stone Manganese Marine Ltd., 15
Tandem and Contrarotating, 200-202*
"Prossio", 479
"Prvi Februar", 122, 484
Pumps:—
Dryads, 91, 205
Hamworth, 94, 624*, Special Survey, September
Houttuin-Pompen, 122, 187-188*
Hydraulic Motors, 354*
Jönköpings, 624
Medan, 110
Mathieson (Olin) Ltd., 147
Megator, 571
Sigmund, 423*, 548, 636
Stothert and Pitt, 203
"Purha", 466, 473
Pusnes Mek. Verksted, 96, 158
"Pyatigorsk", 475

Q

"Queen Elizabeth 2", 313, 406, 416*, 471, 505-510*, 588

R

"Rachel", 320, 480
Radar (See Navigational Equipment)
Radiotron Ltd., 571, 582
Radiography Equipment, 448
"Ragar", 122, 483
"Ralph Miserer", 202, 275, 472
Randzel", 474
"Rangamat", 275, 289, 404
"Ranger I", 602*
"Rauma", 122, 473
Raunto, K., Article on Finnish Shipbuilding, 554-555*
Read, R. C., Article on Australian Shipbuilding, 550-551*
Rea, R. and J. Ltd., 123
Reardon, Sir William, Smith and Sons, 234
Record of Records, Ships on Order Survey, July "Redgate", 540
Redhand Compositions Co., 208, 355
Redhead, John and Sons, 4
Rediform Communications Equipment, 93, 203, 356, 449
"Reefer Scan", 330*
Refrigerated Vessels:—
 "Matara", 38, 177*
 "Port Caroline", 395-398*
 "Port Chalmers", 395-398*
 "Southland Star", 245*
Refrigeration Plant, Troldahl, 259
"Reggio", 54
Reguleurs Europa, 581
Reid, A. Manufacturing Co., 572
"Reiko Maru", 320, 480
"Reine Astrid", 50
"Reisui Maru", 10, 477
Rekenfjord Werke, 351
"Reiko", 331*
Reilmitt (London) Ltd., 576*
Remote Control Systems (See Automation)
Renholds-Maskiner, A/S, 94
"Rey Favil", 320, 483
"Rheinfel", 466, 474
Rheinstahl Nordseewerke G.m.b.H., 74, 243, 544, 600
Rhodes, P. H. H., 332
Rickman, G. R., 458A
"Ringard", 364, 473
"Rio Amazonas", 10, 476
"Rio Magdalena", 483
"Rita", 467, 482
"Rivater", 166, 325, 476
"River Banu", 274, 474
"River Niger", 69, 121*, 474
"River Ogin", 364, 474
Robe Caledon Group, 313, 419
Robe, Henry Ltd., 98, 232, 313, 326, 419
Robbie, J. H., 617
Robbie, Balbirnie and Co., 391
Roberts, J. M., 332
Roberts, J. W. Ltd., 157

THE MOTOR SHIP

Robertson, T. M., 633
 Rockwell (Flow Controls) Ltd., 630
 "Rode Zee", 375, 552-553*
 Rogan, A. J., Article on British Railways Container Service, 480-486*
 "Roi Baudouin", 50
 Roland, 319, 474, 499
 Roll-on/Roll-off Ships:—
 "Denmark", 283-286* (G.A. and Machinery Drawings)
 "Duvel of Holland", 541-544* (G.A. Drawings)
 "Koningin Julianne", 360-362*
 "Mar Caribe", 97-98*
 "Muñster", 141-144* (G.A. Drawings)
 "Ponce de Leon", 104-106* (G.A. Drawings)
 Roll-on/Roll-off Ships of 1968, 495*
 "St. George", 225-230A* (G.A. and Machinery Drawings)
 Rolls-Royce, 390, 611
 Rolls-Royce (Composite Materials) Ltd., 635
 Rolwi, 11, 206, 482
 "Romo", 52
 "Rona", 11, 483
 Rondegegen, 79
 Ronneburg, 319, 475
 Ropes, Shaw, 157
 Ropes, Stat of Tau, 91
 Ropner Shipping Co. Ltd., 375
 Roques, W. S., 11
 Rosenberg Mek. Verksted, 211
 Rosseter, P., 66
 Ross Group, 375
 "Rotra", 50
 Rotterdam Drydock N.V., 18, 620
 Rorke, Dr. J., 617
 "Royo Maru No. 8", 274
 "Ruby", 274, 480
 "Rudderman", 466, 471
 Rue, De La Fristov, 586
 "Rugwadarsand", 469, 598
 "Ruhr", 385
 Rusling, John Ltd., 101
 Russell, J. and Co. (Liverpool) Ltd., 295
 Russell, J. and Co. (London), 391
 Russell, J. M., Article on South African Shipbuilding, 569-570*

Ruston:—
 AO Engines, 42, 94*, 127, 400, 547
 Canadian Progress, 581-582*
 First Scandinavian Order, 324
 "St. George", 226-230*, 268-271*
 "Welsh City", 235-238*
 Dredger Machinery Conversion, 103
 Kendall, T. L., 617
 Progress During 1968, 537*
 Rust Solvent, Lusol, 308
 "Ru Yung", 565-567*
 "Ryde", 46
 Rye-Arc. Radiographic Division, 34*
 "Ryuaku Maru", 167, 480
 "Ryoyu Maru No. 8", 480

S

"S.A. Constantia", 167, 267*, 494*
 "S.A. Zebedias", 476
 "Sabina", 414, 473
 "Sachsenstein", 69, 474
 "St. Clair", 48
 "St. Clair Columbia", 146*
 "St. Clement", 48
 "St. George", 225-230A*, 268-271*, 274, 471, 513
 "St. Germain", 46
 "St. Jason", 84*
 "St. Jasper", 326, 451-452*
 "St. Olaf", 48
 "St. Patrick", 46
 "St. Rognvald", 48
 "St. Niran", 48
 "Sakai Maru", 479
 Salinometer, Transistorized, 354
 "Saltergate", 466, 476
 "Satohime", 56
 Samyan Navigation Co., 400, 516
 "Sam Benito", 483
 "San Chandi", 364, 484
 "Sandefjord", 10, 480
 "Sanderup", 69, 476
 Sandhills Engineering Co., 438
 "Sandgo", 122, 471
 "Sanju Maru", 481
 "San Joaquin Valley", 68, 473
 Sanko Steamship Co., 575
 Sanscot Shipping, 600
 "Santa Cruz", 466, 471
 "Santa Monica", 174
 "Sao Marcos", 472
 "Santa", 48
 Sasebo H.I., "Bulford", Special Survey, December
 "Saska Kovalyow", 475
 Sato, M., Article on Japanese Shipbuilding, Special Survey, December
 Saunders Switch Gear Ltd., 258
 Saunders Valve Co., 112
 "Savannah", 173, 327*
 Saxton, W. F., 390
 SBC (Underwater) Ltd., 563
 "Schelde", 385
 Scheldepoort, 563
 Schermuly Ltd., 205, 450
 Schlichting Werft, 2, 289, 629
 Schmidt-Sorensen, J., Article on B. and W. Medium-speed Engines, B. and W. Survey, May

Schrakamp, J. W. A., Article on Cylinder Lubrication, 149-152*
 "Schwarzburg", 475
 "Scillonian", 48
 Scissor Lifts, 178*
 Scottish Institution of Engineers and Shipbuilders, 73
 Scott, L., 568
 Scott Lithgow Group, 18, 96, 161, 418, 435; Article by A. R. Belch, Special Survey, September
 Scott Lithgow Drydocks, 419*
 Scott, W. T., 434
 Sea Controls Ltd., 404
 "Sea Freightliner I", 5-8B*, 468, 471, 485*, 561*
 "Sea Freightliner II", 166, 468, 471
 "Seashark", 482
 Sea-Land Service Inc., 344, 531, 545
 "Seaford Challenger", 325, 495*
 Sealord Shipping Co., 325
 "Sea Quest", 157
 "Sea Star", 364, 483, 516-517*, 636
 "Sea Witch", 376-381*, 468, 484, 561*
 "Seiko Maru", 478
 "Seiryo Maru", 467, 481
 "Seiun Maru", 480
 "Seisan Maru", 467, 480
 "Selandia", B. and W. Survey, May
 "Selvag Senior", 35*
 Sembang Shipyards Ltd., 241, 562
 S.E.M.T.-Pielstick:—
 "Crossley-Pielstick", 12*, 233
 "Freedom", Vessel Engine Considerations, 77-78
 "Galini", Machinery Installation, 369-372*
 "Mahar" and "Mehsud", Machinery Installation, 278-280*
 "Manchester Challenge", Machinery Installation, 428-429*
 PA Engines, Special Survey, February
 PC2 Engines, Special Survey, February
 PC3 Engine, Special Survey, February
 See also Special Survey, February
 "Sendan Maru", 122, 171, 480
 "Senkei Maru", 478
 Separator, Thrige-Titan, 281*
 "Seramorich", 484
 Serck Controls, 258
 "Sersei Lazo", 319, 342, 476
 "Sersei Yesenin", 414, 484
 Sewage Treatment, Defecamat, 204
 "St. Francesco di Paolo", 54
 Shaft Seal, Crane and Packing Ltd., 37*
 Shalimar Works Ltd., 34, 241
 "Shamaly", 166, 478
 "Shanklin", 46
 Sharples Centrifuges, 41*, 423*
 Sharpness Shipyards Ltd., 103
 Shaw, John Ltd., 157
 Shaw, R. A., 66
 "Sheaf Crest", 166, 183-186*, 471
 Shell Chemicals U.K. Ltd., 157
 Shell Group, 126, 401-402
 "Shepperton Ferry", 46
 "Shinfukushic Maru", 481
 "Shinkai Maru", 481
 "Shikishima Maru No. 8", 481
 "Shinnan Maru", 467, 479
 "Shindo Maru", 319, 479
 "Shinsei Maru", 10, 477
 "Shinyo Maru", 167, 414, 479, 480, 481
 Shipboard Information System Development Group (SISDG), 174
 Shipbuilding:—
 American, 289, 529-530*
 Australian, 550-551*
 British, 1, 60, 208A, 587; See also Special Survey, September
 Bulgarian, 16
 Danish, 514-515*
 East German, 127
 Finnish, 554-555*
 French, 527-528*
 German, 544-545
 Hungarian, 351-352*
 Indian, 327
 Italian, 298*, 523-524*
 Japanese, 16, 457, 487, 489-493*, 567; See also Special Survey, December
 Naval, Special Survey, September
 Norwegian, 287, 375, 500
 Polish, 556-558*
 Scottish, 313
 South African, 569-570*
 Spanish, 290-292*
 Swedish, 511-512*
 Taiwan, 158A-159
 World, 112A, 265, 359
 See also Quarterly Surveys of Ships on Order
 Shipbuilding Companies, List of British, Special Survey, September
 Shipbuilding Contracts, 9, 68, 120, 165-166, 216, 275-276, 320-321, 363, 413, 465, 539-540, 597-598
 Shipbuilding Costs, Special Survey, September
 Shipbuilding Industry Board (SIB), 263
 Shipbuilding Industry Training Board, 208
 Ship Design:—
 Aluminim Construction, 406
 Articulated Towing at Sea, 629*
 Cargo Liner Hull Forms, 565-567*
 Cargo Liners, 596
 Computer Programme for Steelwork Design, 577*
 Ferro-cement Hulls, 522*
 Fishing Vessel Construction, 454, 457
 Future Prospects, 458-459
 Japanese Designs for 500 000-ton Tankers, 289
 Mathematical Hydrodynamics, 374
 Merchant Ships and Shipping, 346

Ship Design:—Contd.
 Pumping Machinery for Marine Propulsion, 252
 Tandem and Contrarotating Propellers, 200-202
 Tankers with Double Bottoms, 547, 587
 Ship Speed Logs, 155*
 Chesapeake Instrument Corp., 436
 Thomas Walker and Sons Ltd., 89*, 548
 Shiprepairs:—
 British, 263, 437; Special Survey, September
 Egyptian, 520
 Electrical, 621*
 Electrowriter System, 101
 Greek, 192*
 Portuguese, 518-519*
 Singapore, 194, 344, 562
 List of British Companies, Special Survey, September
 Spanish, 102
 Welsh, 81, 345*
 See also Docks, Floating and Repair and Underwater Services
 Ships Completed in 1968, 470-484
 Ships' Gear, International Exhibition, 203-205*
 Ships on Order:—
 Published Quarterly, Four Surveys, April, July, October, January
 Shipyards Described:—
 Ciotat, 625-626*
 Euskalduna de Construcción y Reparación de Buques, 290-292*
 Shipyard Equipment, Bakker, 423
 "Shoei Maru", 478
 "Shokai Maru", 319, 480
 "Shoko Maru", 480
 "Shori Maru No. 3", 479, 481
 "Shoryu Maru", 320, 481
 "Shoso Maru", 478
 Shot Blasting, Loyne Ltd., 403
 "Shots Rustaveli", 319, 474
 "Shuhu Maru", 466, 477
 "Shuko Maru", 466, 481
 "Shunko Maru", 477, 481
 "Shuto Maru", 89, 481
 "Siibon", 122, 483
 "Silboto", 274, 297*, 483
 "Sidney Spiro", 319, 478
 Siemens, 585
 Siatas, J. J., 385
 S.I.G.M.A., 589
 Sigmund Pulsometer Pumps Ltd., 423*, 548, 536
 Silbestos Asbestos, 158
 "Silja", 482
 Silley, Cox and Co., 95, 191
 "Silver Lonevity", 467, 479
 "Silvermerlin", 320, 484
 "Silvio", 471
 Simon, F. H., 148
 Simonsen Radio, A/S., 600
 Sinclair, L., Article on Tandem and Contrarotating Propellers, 200-202
 Sinclair Scott, M. A., Article on British Shipbuilding, Special Survey, September
 "Si-ei Maru", 479
 Singapore Dockyards, 145
 "Sir Percival", 10, 471
 "Si Brovig", 598
 "Siethonia", 274, 478
 "Sieland", 50
 "Siholm", 11, 484
 "Skagen", 54
 "Skandia", 56
 "Skanska", 414, 471
 SKF Propeller Nuts, 92
 "Skipper Clement", 52
 Slack and Parr Ltd., 157, 635*
 "Slavia Vajner", 319, 478
 Sloan, N. A., 332
 "Sloman Alsterpark", 364, 474
 "Sloman Alsterstor", 474
 Smit-Bolnes Engines, 126
 Smit, L. and Co., 552
 Smith, A. M., 148
 Smith's Dock Co., 173, 425
 "Smolny", 482
 "Snow White", 69, 481
 Society of Naval Architects and Marine Engineers (SNAME), 344, 417
 Sofrane, S.A., 90
 "Solus 3", 475
 Solas Marine, 257
 "Solin", 620
 "Solstad", 467, 483
 "Solway Fisher", 319, 468, 476
 "Sonderjylland", 52
 "Sound of Islay", 121*, 373*
 South African Marine Corp., 267
 "Southland Star", 245
 "Southsea", 46
 Soviet River Fleet, 232
 "Szoidatei", 475
 Spanish Engines, 312, 324
 Spanish Fishing Industry, 455-456*
 Specialized Ships:—
 Cement Carrier "Planet", 38* (G.A. Drawings)
 Coastal Barge "Odin" (G.A. and Machinery Drawings)
 Conveyorship "Universe Conveyor", 128*
 Ferro-cement Trawler "Lee Christine", 522*
 Great Lakes "Canadian Progress", 581-582*
 "Ralph Misener", 202*
 Heavy-lift Vessel "Magician", 605-610* (G.A. and Machinery Drawings)
 Hydrofoiler "Expressan", 178
 Icebreaker "Verma", 634*
 LASH-type Ships, 384
 Nuclear-propelled "Otto Hahn", 420-422*
 OBO Carrier "Obo Prince", 349-350*
 Paper Carrier "Doris", 86-87* (G.A. Drawings)

Specialized Ships :—Contd.

Products Carrier "Esso Baltica", 129-133
(G.A. Plans)
Repair Ship "Zeltin", 520*
Seabed Exploration Vessel "Duplus", 432-433*
Sea Bottom Grader "Kinryu Maru", 174*
Stone Carrier "Petro Nic", 351-352* (G.A. and Steelwork Drawings)
"Stone-dumping Barge Cetus", 339-340*, (G.A. Drawings)
Sludge Carrier "Glen Avon", 578-580*
Supply Vessel "Lady Margaret", 504*
Trawlership "Ponce de Leon", 104-106* (G.A. Drawings)
Urea Carrier, "Urea Maru", 601*
Water Tractor, "Indusbank", 232*
World's Largest Car Carrier Ordered, 328*
Spero", 43*
Sperry Group, 585
Sperry Rand Corp., 573
Spes", 10, 470
Spindrift", 325
Spirit of Liberty", 484
split Shipyard, 16, 42, 289
sprayed Insulation Ltd., 260
Springer", 50
Sprogo", 50
Spruce", 10, 480
pyron, A. G., 332
Spyros A. Lemos", 467, 484
stabilizing Systems :—
B. and W.-Siemens Electro-fin, 412
Flume, 92, 259
Stadt Aschendorf", 545-546*
tagg, E. H., 389
Staghound", 376, 469
stainforth, J. A. R., 148
stainless Steel Cladding, 323
tal-Laval Turbin, A/B, 148
tai og Tau, A/S, 91
tanhope Sota Ltd., 633
Star Billabong", 79
Star Caribbean", 275, 484
Star Clipper", 540
Star Columbia", 69, 127*, 484
Starke", 56
Star of Kuwait", 319, 478
Star Shipping Group, 79
"Starward", 414, 474, 524*, 604, 613-616*
"Stavik", 472
Steering Gear :—
Astilleros de Cadiz, 307*, 423
Stepen, F., 332
"Stella Nova", 122, 476
"Stena Germanica", 43*
"Stena Nardica", 46
Stephen, Alexander and Sons, 1
Stephen and Carter Ltd., 344*, 392
Stephenson, C., 369
Sternbearings, Rubber, 259
Sterngear :—
Glacier Herbert System, 204
Turnbull, 134-135*, 181-182*
Stokoe, C. L., 190
Stone Manganese Marine Ltd., 15, 200, 355, 487
Stone, J. and Co. (Deptford) Ltd., 111
Storm Vaerf, 326, 603
Storebælt", 50
Storey, A., 359
Stork-Werkspoor, 288, 294
Stothert and Pitt Ltd., 42, 203
"Steve Scotia", 68, 473
Steve Tradition", 598
"Straat Accr", 466, 476
Straat Adelaide", 319, 476
Straat Amsterdam", 275, 476
Straat Auckland", 466, 476
Straat Hobart", 167, 480
Straat Hongkong", 10, 480
Straat Honshu", 364, 480
Strachan, G. R., 148
Strangefield, J. R., 390
Stranks, P., 148
Stripping System, Cargo Oil, 302
"Strymon", 540
Stückner Derricks, 607*
"Subin River", 467, 483
Subsidies, Shipbuilding, 531
Suez Canal, 461-463*
"Sugar Crystal", 161-1648*
Sugar Line Ltd., 161
"Sugar Producer", 166, 471
"Suleyman Stalskiy", 484, 487
Sulzer :—
Brown, Boveri-Sulzer Turbo Machines Ltd., 549
George Clark Engine Orders, 487
Japanese Production of RND105-type Engine, 160
Large-bore Engines, 2
Largest European-built Engine, 175-176*
London Appointments, 11
Progress During 1968, 535-536*
RND105-type Engine, 160, 218-228*, 366-368*
Turbochargers for 1 050mm-bore Engine, 503
1 050mm-bore Engine, 18*, 208, 366-368*
250mm-bore Engine, 445-446*
Sumitomo Heavy Machinery Co., 126
"Sunderbank", 467, 484
Sunderland Forge Works, 135
"Sunssonia", 364, 474
Sun Shipbuilding and Dry Dock Co., 104
"Sunward", 613
Supernar, A. G., 399
Supply Vessel "Lady Margaret", 504*
"Surcouf", 274, 474
"Susong", 466, 476
Sutherland, F. N., 588
"Suzukawa Maru", 10, 480, 487
"Suzukazan Maru", 467, 481
"Svalan", 56

"Svea", 58
"Svea Jarl", 58
Svendborg Skibsværft, A/S, 94*
Svenska Flakfabriken, A/B, 92*
Swallow, Sir William, Article on British Ship-building, Special Survey, September
Swan Hunter Group :—
Appointments, 434
Article by T. McIver, Special Survey, September
B.I. Cargo Liner Orders, 464
British Rail Ferry Order, 16
Change of Name, 600
L.P.G. Carrier Order, 289
Repair Division, 562; Article by A. C. Mackesy, Special Survey, September
Singapore Appointment, 191
South African Repair Division, 438
Swedish Cellulose (S.C.A.), 256
Swedish Lloyd, 373
"Sweet Grace", 10
Switchboards, zoccon, 207
"Sydlyn", 54
"Sydnav", 584
"Sylvania", 414, 482
"Sylvia Cord", 167, 382*, 480
"Symra", 603
Syncrolift Systems, 145, 437*, 344, 521
"Syrie", 166, 470

T

"Taiko", 480
Taikoo Dockyard and Engineering Co., 521*
"Taimyr", 467, 480
"Tai Ning", 419, 467, 480
"Taipan", 481
"Tairyu Maru", 166
"Taisho Maru", 479
"Taisei Maru", 477
Taiwan Navigation Co., 419
"Takachiho Maru", 478
"Takara", 167, 479
"Tamano", 69, 480
"Tamashima Maru", 11, 480
"Taworth", 319, 470
"Tanabata", 69, 479
"Tanganrog", 475
Tangen, Walter, A/S, 89
Tangen Verft, 443
"Tangerincor", 364, 482
Tank cleaning :—
BP Marine Tank Cleaner
Computer Operated, 140*
Dasic Machines, 37*
Gamlen Machines, 562
Perdin Co., 147
"Tank Countess", 192*
Tankers :—
Afloat Joining Method of Construction, 328-329*
"Bergebragd", 211-215* (G.A. and Machinery Drawings)
"Bulford", * Special Survey, December
Burning Crude Oil, 310-311, 324
Cargo Transfer at Sea, 126
"Claudio R.", 306*
Computer Operated Tank-cleaning System, 140
Computers, for 586
Coolingwater System, 109*
Demand for, 3
Double Bottom Design, 547
Gauping System, 580
Japanese Building Capacity, Special Survey, December
Japanese Designs for 500 000-ton Tankers, 289
"La Rabide", 430*
Largest Capacity Cargo Oil Pumps, 624
Launching and Drydocking Problems, 60
"Megara", 401-402*
Million Ton Tankers, Studies for, 374
Pressure Vent for Tankers, 41
Problems of Mammoth Tankers, 209
Proposal for 450 000-ton Ship, 487
Propulsion Monitoring Equipment, 402
Screw Pumps for Cargo Handling, 187-188
"Sea Star", 516-517*
Self-stripping Systems for Cargo Oil, 302
Tankers of 1968, 525*
Testing of Electrical Systems, 603-604*
"Universal Ireland", (G.A. Drawings), Special Survey, December
World Fleet, 126
World Fleet Review, 311
See also Product Carriers
Tankers, Gas :—
"Antilla Cape", 314-318* (G.A., Structural Sections, and Machinery Drawings)
Conch Licence for Rotterdam Drydock Co., 18
Diesel-engined Methane Tankers, 485
"Fridtjof Nansen", 289
Gas Tankers of 1968, 499*
"Humboldt", 115-119* (G.A., Structural Sections, Scale and Machinery Drawings)
Methane Tanker of 50 000 m³, Order for, 318
Milford Haven Terminal, 548*
"Phillips Arkansas", 589-594* (G.A., Mid-ship Section, D.W. scale and Machinery Drawings)
P. and O. Group Order, 167
Swan Hunter Group Order, 289
"Wiltshire", 107-108*, 322*
World Fleet, 113
"Tarbelas", 274, 474
"Tarmo", 634
"Taran", 56
"Tasty", 482
"Tasman Maru", 319, 479

U

" Uganda ", 33
 Uglands Rederi, A/S, 326
 " Ulan Ude ", 482
 " Ulster Prince ", 43*, 48
 " Ulster Queen ", 48
 Ultrasonic Ullage Computer, 110
 Underwater Services:—
 Brushboat Cleaning, 146*
 Kesi Inspections, 34
 London Graving Docks, 563
 Maritime Maintenance Pty. Ltd., 563
 Phocane-Sous-Marine S.A., 563*
 S.B.C. (Underwater) Ltd., 437, 563
 SCAMP Remote-controlled Underwater Brushing, 296*
 Underwater Cartridge Hammer, 296
 Underwater Maintenance Co., 146
 Underwater Techniques Inc., 34
 " Union East ", 467
 " Union East ", 478
 " Union Evergreen ", 11, 484
 " Union Expansion ", 319, 478
 Union Steam Ship Co., 356
 " Union Wisdom ", 598
 United Diesel AB (UDAB), 538
 Unitor, A/S, 93*
 " Unirader ", 275
 " Universe Conveyor ", 128*, 478
 " Universe Ireland ", 326, 406, 478, Special Survey, December
 " Universe Island ", 231*
 " Universe Kuwait ", 480
 Unochrome International, 365
 Upper Clyde Shipbuilders Ltd., 95, 234, 417, 487, 505, 600, Article by A. E. Hepper, Special Survey, September
 Upper Lakes Shipping Ltd., 581
 Urags H.I., 169
 Carb Liner Designs, 565-567
 I.H.C. Agreement, 417
 " Jinko Maru ", 575*
 LASH Ship Order, 85
 Merger with Sumitomo, 126
 New Shipyard, 560*
 120 000-ton Tanker, 418
 " Urea Maru ", 540, 601*
 " Urshalim ", 122, 356, 476

V

Vactric Control Equipment Ltd., 450
 Vacu-Blast Ltd., 193, 257
 " Valdes ", 374
 " Valencia ", 46
 Valentine, F., Article on Automation of " Glen Avon ", 578-580*
 " Valiant ", 393
 " Valle de Orozco ", 122, 483
 " Valletta ", 274, 484
 " Valmiera ", 482
 Valves:—
 Automatic Shut-off, 630
 Bivac Air, 354
 Elliott Rotating Disc-type, 73
 Glocon, 344
 Grinding Machine, 256*
 Non-return, 448, 571
 Pearson, 563
 Saunders, 112
 Servo, Telehoist, 450
 Valve Seat Regrinding Equipment, 103*
 " Valya Kotik ", 476
 " Vancouver Forest ", 600*
 Van Der Horst, N.V., 365
 " Van Hattum en Blankevoort ", 466, 476
 Varec, Neill Ltd., 158
 " Varma ", 466, 473, 634*
 " Vasily Chapayev ", 166, 297*, 342*, 476
 " Vasily Goloskin ", 475
 " Vassijaure ", 343
 " Veera Pandian ", 330*
 " Vega ", 10, 477
 " Veissauer ", 374
 " Venera IV ", 476
 " Ventura ", 540
 " Venustiano Carranza ", 10, 478
 " Vera Barton ", 103
 Verona United Shipyards, 232
 " Lady Margaret ", 504*
 Million-ton Dock, 562
 Repair Agreements, 33
 South African Proposals, 343
 " Vestolilik ", 122, 474
 " V. G. Swanson ", 551*
 " Viator ", 467, 482
 Vibration, Suppression Mountings on the Koningin Julianas", 362, 364A
 " Vicente Puchot ", 467, 483
 Vickers-Armstrongs (Engineering) Ltd., 359
 Vickers, 373, 549, 588
 Shipbuilding Group, 95, 153-154*
 M.A.N. Engines, 172
 " Victoria ", 69, 84*, 484
 " Viking ", 56

" Viking I ", 56
 " Viking II ", 56
 " Viking III ", 56
 " Villandry ", 46
 " Virginia ", 10, 480
 " Visby ", 56
 " Vishva Bahkti ", 598
 " Vishva Siddhi ", 274, 476
 " Vitoria ", 472
 " Vittorio Veneto ", 466, 476
 " Viva ", 319, 479
 " Vladimir Mayakovskiy ", 467, 484
 V.M.F./Stork-Werkspoor, 288, 373
 Vogelweith, L., Article on Applications of Medium-speed Engines, Special Survey, February
 Vokes Ltd., 189, 633*
 " Volchansk ", 475
 Volharding, Scheepvaart, Mij N.V., 314
 Voltz, P., Article on German Shipbuilding, 544-545*
 " Voo Shee ", 467, 478, 600
 Vosper Thornycroft Group, 74
 Hovercraft, 444
 Kuwait Order, 233
 Norris Castle ", 287
 Repair Division, 101
 Repair Ship, Zeltin ", 520*
 Singapore Activities, 168, 190
 Stabilizer Orders, 111
 " Vostochny ", 475
 Vyv. A. en Zonen Scheepswerven N.V., 129, 541
 " Vysotsk ", 475
 " Vzormorje ", 475

W

Waage, Hagb., 603
 " Waalekerk ", 69, 476
 " Wakakusa Maru ", 319, 480
 " Wakanesan Maru ", 10, 480
 " Wakashio Maru ", 11, 481
 " Wakatake Maru ", 479
 Wales, R. C. H., 498
 Walker, B. P. C., 389
 Walker, Thomas and Son, 89, 155, 548
 Walker, W. P., 617
 Wallace, W. L. S., Article on British Marine Equipment Council, Special Survey, September
 Wallenius Group, 415, 488
 Warming, Norrie and Co., 204
 " Warna ", 472
 Warn, William and Co., 403
 Warren, A. P. Ltd., 41
 " Warsak ", 10, 474
 Wartsila Oy, 324, 415, 435, 601, 602, 634
 " Waza Express ", 52
 " Wazo Maru ", 477
 Water Pollution Monitor, 155
 Watkins, William Ltd., 289
 Watson, G. R., 332
 Watt, J. A., 190
 Watson, J. L., Article on Dorchester Club, 497-498*
 Wayne Tank and Pump Co., 157
 " Wayway ", 466, 477, 548*
 Wear Shipbuilders' Association, 95
 " Weatherley ", 167, 479
 " Weipa Maru ", 598
 Weir, J. and G. Ltd., 122, 205, 259, 414
 Welding:—
 Argon Arc Welding Torch, 257
 Bi-metal Joints, 258*
 Bore-welding, 345
 Crestex Electrodes, 111
 Dynamels Primer, 633
 Du Pont Explosion-bonding Process, 258*
 Electro-magnetic Clamps, 447*
 Explosive, 3
 Gravity Welding, 158*
 Interlas Welding Sets, 258*
 Mobile Turntable, 207*
 Mini-deck Welder, 155*
 Unitor, A/S, 93*
 " Welsh City ", 234-238*, 274, 471
 " Welsh Minstrel ", 484
 Werft Nobiskrug, 545, 558
 Werkspoor, 535
 Engines in " Rode Zee "
 Medium-speed Engines, 25-26*
 " Weser ", A/G, 11, 314, 524, 544, 613
 " Wesser Express ", 364, 406, 468, 473
 " Westerbeek ", 274, 476
 Westermoen Hydrofoil, A/S, 178
 Westfalia Lunen Deck Machinery, 91*
 " Westminster Bridge ", 68, 471
 Westinghouse Brake and Signal Co., 635
 Whately, R. F. A., 66
 Whessoe Ltd., 41
 White, J. Samuel and Co., 419, 456
 Whitfield, R. T., 390
 Whittal, H. A., 66
 Withington and Mitchell Ltd., 242
 Whyalla Shipbuilding and Engg. Works, 158
 Wibye, T., Article on Norwegian Shipbuilding, 500*
 " Wiima ", 473
 Wilder, John A., 190

Wild, M. B. and Co., 296
 Wilhelmsen, Wilh., 586
 " William, R. Adams ", 480
 Williams, D. S. D., 17
 Williams, N. C. D., 619
 Williams, W. F., 147
 Willis, F. E., 568
 " Wilma ", 466
 Wilson, D. E., 434
 Wilson, J. R., Article on A.E.I. Steam Turbines, Special Survey, September
 Wilson, R., 332
 Wilson, Walton International Ltd., 450, 549
 Wilton-Fyenoord, 295, 373
 " Wiltsire ", 107-108*, 275, 322*, 471, 499*
 Wiltshire, J. T., 580
 Winsor, " Sky Climber ", 344*, 392
 See also Deck Machinery
 Windboats Ltd., 233, 522
 Winders, J. M., 582
 " Windford ", 487, 481
 Winkley, P., Article on A.E.I. Steam Turbines, Special Survey, September
 Winslow Filters, 448, 577*
 " Winston Churchill ", 52
 " Wismar ", 474
 " World Diana ", 467, 480
 " World Hongkong ", 436
 " World Kindness ", 598
 World's Largest (See Record of Records, Ships on Order Survey, July)
 " World Mobility ", 11, 481
 " World Negotiator ", 167, 480
 " World Neighbour ", 10, 478
 " World News ", 478
 " World Nomad ", 274, 478
 " World Novelty ", 319
 " W. R. Adams ", 414
 Wrangham, C., 498
 World-Wide (Shipping) Group, 435
 " Wyborgskaja Storona ", 482

X

No entries under this heading

Y

" Yamahiro Maru ", 319, 470
 " Yamanobu Maru ", 478
 Yamashita-Shinnihon Steamship Co., 416
 " Yamato Maru ", 274, 481, 478
 " Yamatsutsu Maru ", 477
 " Yamayatsu Maru ", 479
 " Yanagi Maru ", 69, 479
 " Yantarnyy ", 473
 Y.A.R.D. (Yarrow Admiralty Research Dept.), 17, 173, 417, 419
 Yarrow (Shipbuilders) Ltd., 602
 " Yasutama Maru ", 477
 " Yatsushima Maru ", 478
 " Yeh Yung ", 320, 481, 565-569*
 " Yoho Maru ", 466, 477
 " Yoshu Maru No. 5 ", 479, 481
 " Youngili ", 467
 Young, R. T., 389
 " Yoma Maru ", 480
 " Ysselwerf, N. V. ", 173
 " Yukai Maru ", 481
 " Yukikawa Maru ", 479
 " Yuko Maru ", 320, 481
 " Yuwa Maru ", 166, 477

Z

" Zakopane ", 482, 549
 " Zamose ", 483
 " Zaporozje ", 482
 " Zaragoza ", 274, 483
 Zealand Steamship Co., 360
 Zeiss, Theodor, 327
 " Zeltin ", 520*
 " Zenkoran Maru No. 1 ", 10, 479
 " Zenkoran Maru No. 2 ", 540
 " Zeno ", 480
 " Ziemie Kielecka ", 466, 476
 " Ziemie Koszalinaka ", 364, 476
 Zina Portnova, 475
 Zinner, K., Article on M.A.N. Super-large-bore Engines, 239-240*
 " Zinnia ", 364, 471
 Zone Controls Ltd., 207
 " Zuiyu Maru ", 477
 " Zygmunt Star ", 483
 " Zywiec ", 472

* Illustrations